

EXPLORING FRAUD, WASTE, AND ABUSE WITHIN TELEHEALTH



**HEALTHCARE
FRAUD
PREVENTION
PARTNERSHIP**

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The Healthcare Fraud Prevention Partnership would like to thank participating Partners for their contributions.

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EXECUTIVE SUMMARY

Healthcare delivery through telehealth allows a provider to consult with patients remotely through electronic and telecommunication technologies. Prior to the COVID-19 Public Health Emergency (PHE), telehealth services were, generally, only used and paid for in limited circumstances; however, in response to the PHE, the need for telehealth services accelerated due to quarantine, shelter-in-place, and stay-at-home restrictions implemented to reduce COVID-19 exposure and community spread. Subsequently, most federal, state, and private payers introduced flexibilities in telehealth policies during the PHE, which allowed for an increase in access to healthcare when traditional office visits were not feasible. Aware of these PHE flexibilities and the associated increase in telehealth utilization, bad actors have sought to take advantage of the growing acceptance of telehealth to both expand the scope and reach of existing fraud, waste, and abuse schemes and create novel ones.

Healthcare fraud, waste, and abuse can have a direct impact on individual and population health outcomes, pose a risk to one's private health information, and burden the United States (U.S.) healthcare system. Large-scale fraud schemes can also increase healthcare costs and waste limited resources. In addition, healthcare fraud, waste, and abuse can increase the risk for mortality or emergency hospitalization if patients are prevented from accessing medically needed services or they receive inappropriate medical direction. Due to these collective effects of healthcare fraud, waste, and abuse, it is crucial to identify potential vulnerabilities to help detect and prevent potential schemes from occurring as they may continue to evolve in novel ways. Furthermore, it is imperative that fraud, waste, and abuse do not corrupt the use of new technologies and policies that have the potential to expand access, improve care, and reduce costs.

In response to the necessary accelerated use of flexibilities with respect to telehealth during the COVID-19 PHE – in addition to its subsequent exploitation by bad actors – federal, state, and local agencies together created a wide-reaching collaborative effort that took an innovative and instructive approach to combat related fraud, waste, and abuse. In support of these efforts, the Healthcare Fraud Prevention Partnership (HFPP) developed this white paper in collaboration with the Stanford University School of Medicine. Based on HFPP Partner interviews, peer-reviewed publications, and federal and state reports, this report aims to review current telehealth policies, summarize the benefits and multi-level barriers in telehealth care delivery, describe vulnerabilities, and identify and characterize telehealth-related schemes. Vulnerabilities in telehealth delivery include billing and coding, COVID-19-related telehealth schemes, and telemarketing schemes that falsely appear to deliver healthcare using telehealth. This paper reviews methods to identify and mitigate fraud, waste, and abuse in telehealth using referrals and hotlines, data analytics, databases and electronic health records, healthcare provider and patient education, and cross-disciplinary collaboration and information sharing. It also identifies several systemic challenges in detecting fraud, waste, and abuse in telehealth, such as the evolving nature of telehealth policies and schemes. Lastly, this white paper provides recommendations to mitigate these vulnerabilities, such as incorporating strong data analytics and machine learning, increasing patient and healthcare provider awareness about fraud, waste, and abuse schemes, and developing strong collaborative relationships among various types of healthcare organizations.

INTRODUCTION

Telehealth allows a healthcare provider to offer care for their patients primarily using electronic and telecommunications technologies via a computer, tablet, or phone for patient-provider information exchange and remote monitoring.¹ When delivering care via telehealth, healthcare providers use telecommunications technology to remotely provide access to medical care, including assessments, diagnoses, and health information.² Prior to March 2020, telehealth services were allowed and paid under limited circumstances. For example, in the Medicare Part B Fee-for-Service program (Medicare FFS)^a, telehealth services were restricted by statute for use in certain types of medical care locations that were in rural areas or health professional shortage^b areas.³ They were also restricted to established Medicare patients and certain types of healthcare practitioners.³ Even with those limitations, telehealth allowed access to specialty healthcare providers, reduced travel time and cost, and lessened wait times for an appointment for many patients.^{1,4}

In response to the COVID-19 Public Health Emergency (PHE), utilization of telehealth services accelerated due to necessity, especially during quarantine, shelter-in-place, and stay-at-home restrictions.^{2,8} Rapid changes in state and federal laws, policies, and regulations governing telehealth were implemented to ensure access to healthcare when traditional office visits were not feasible. As an example, changes under Medicare FFS allowed more healthcare practitioners to conduct telehealth visits outside of designated sites in rural areas and deliver care via telehealth to both established and new patients.³ Although in-person visits are necessary to provide certain services that require physical examination and/or treatment, telehealth usage increased in popularity for numerous reasons, including the reduction of potential exposure to COVID-19.¹ Furthermore, given the difficulties reported by hospitals in maintaining adequate staffing, hospital capacity, clinical space, and supplies (e.g., beds, personal protective equipment) during the PHE,⁹ telehealth services allowed patients to receive care outside of a clinical setting – limiting the utilization of

WHAT IS TELEHEALTH?

Telehealth is the exchange of health information between a healthcare practitioner and a patient through electronic and telecommunications technologies (e.g., video conferencing, wireless communications, or store-and-forward imaging) to address the patient's health remotely.^{1,3,5} Although telehealth is sometimes referred to as telemedicine, telehealth encompasses a broader scope of remote healthcare services compared to telemedicine.

Telemedicine is specific to providing remote clinical services, whereas telehealth services can be used to provide remote non-clinical services, such as long-term home monitoring, health coaching or education, sharing health information, behavioral modification, and timely feedback.⁵⁻⁷

^aSee § 1834(m) of the [Social Security Act](#), titled "Payment for Telehealth Services."

^bRead more about the Health Professional Shortage Areas (HPSA) designation by Health Resources and Services Administration [here](#).

these constrained resources. Telehealth has also been supported as an appropriate and efficient means of improving healthcare services during the PHE when conducted using appropriate standards of care.⁵ Overall, telehealth has allowed many people to receive healthcare services in a timely manner, avoiding delays that potentially could have led to more serious health issues.⁸

Defining Fraud, Waste, and Abuse in Healthcare

While telehealth is vitally necessary to enable the continued delivery of healthcare to patients, some individuals may try to take advantage of the growing usage of telehealth and use sham telehealth visits and companies to expand and scale their fraud schemes. In some cases, these bad actors use the guise of a telehealth visit to steal a beneficiary's identity to support future fraudulent billing for expensive items and services. In other cases, these individuals use purported telemedicine companies to identify and recruit healthcare providers with kickbacks to order or prescribe unnecessary items and services. Many of these schemes also involve telemarketing or other recruitment companies that are used to target beneficiaries and generate leads.^{11,12} These types of schemes are often referred to as "telefraud," which, for example, the Department of Health and Human Services Office of Inspector General (HHS-OIG) has described as "scams that leverage aggressive telemarketing and so-called telehealth services," to offer unnecessary or fraudulent durable medical equipment (DME) services, genetic testing, diagnostic services, laboratory testing, etc.¹³ Telehealth visits associated with these types of schemes may not represent legitimate medical care or services and raise potential concerns of patient harm and quality of care.¹⁴ All of these fraud, waste, and abuse activities can burden the healthcare system in the U.S. with unnecessary costs and raise premiums and out-of-pocket expenses. Thus, it is crucial to identify potential vulnerabilities to help detect and mitigate fraud, waste, and abuse in telehealth services.

The distinction between fraud, waste, and abuse depends on the specific facts, circumstances, intent, and knowledge of the person(s) or entity in question, as well as the legal jurisdiction.

- **Fraud** includes perpetrating certain unlawful conduct. For example, in a guidance document, CMS states that Medicare fraud typically includes examples of "knowingly submitting, or causing to be submitted, false claims or making misrepresentations of fact to obtain a federal healthcare payment for which no entitlement would otherwise exist."¹⁰
- **Waste** is careless expenditure of resources that can create inefficiencies and also incur unnecessary costs.¹⁰
- **Abuse** includes "any practice that does not provide patients with medically necessary services or meet professionally recognized standards of care."¹⁰

For instance, knowingly billing for services or supplies not rendered could be considered fraudulent conduct, ordering excessive diagnostic tests could be considered wasteful, and unknowingly misusing codes on a claim could be considered abuse.¹⁰

As an entity under the auspices of the Centers for Medicare & Medicaid Services (CMS), the congressionally mandated and federally funded Healthcare Fraud Prevention Partnership (HFPP) is a voluntary, public-private partnership that fosters a proactive approach to identify and prevent fraud, waste, and abuse in healthcare through collaboration, data and information sharing, and cross-payer research studies.¹⁵ With Partners^c from the federal government, state and local agencies, law enforcement, private payers, and healthcare anti-fraud associations, the broad membership provides an opportunity to discuss evolving healthcare issues, such as telehealth, and develop unique recommendations to detect and prevent fraud, waste, and abuse.¹⁵ For example, the HFPP, with support from its Partners, develops white papers on emerging fraud, waste, and abuse topics to inform the public and the professional anti-fraud community about pertinent issues that impact payers, healthcare providers, and patients.¹⁵ Previous white papers^d have highlighted common schemes and provided recommendations for best practices to mitigate fraud in opioid prescribing, clinical laboratory testing, genetic testing, and COVID-19-related services.

The goal of this white paper is to provide an overview of fraud, waste, and abuse in the context of telehealth services. Telehealth services have been increasingly used during the COVID-19 PHE to deliver healthcare and also are anticipated to be used beyond the PHE.⁷ To prepare this white paper, Stanford University and the HFPP conducted interviews with HFPP Partners in late 2021 to gain insight into this topic. As both telehealth policies and fraud, waste, and abuse schemes related to telehealth continue to evolve, it is important to note that this white paper reflects information from HFPP Partner interviews through the end of 2021. In addition to these interviews, peer-reviewed publications and federal and state reports were reviewed and incorporated into the paper.

This white paper addresses the following objectives:

1. Provide an overview of the policies and expansion of telehealth services in response to the COVID-19 PHE.
2. Outline potential vulnerabilities to fraud, waste, and abuse within telehealth services.
3. Describe fraud, waste, and abuse schemes occurring in telehealth.
4. Identify methods to detect, monitor, and prevent fraud, waste, and abuse in telehealth.
5. Deliver recommendations to mitigate fraud, waste, and abuse in the context of telehealth.

^cList of [HFPP Partners](#)

^dPast [HFPP white papers](#) are available on the HFPP Website.

HEALTHCARE DELIVERY THROUGH TELEHEALTH

Implementation of Telehealth in Healthcare Delivery: Prior to the PHE

Prior to the COVID-19 PHE, telehealth was primarily used to connect patients from designated rural areas with remotely-located specialty healthcare providers working from prespecified sites.¹⁶ Although studies have shown the feasibility and value of telehealth in chronic disease management and in improving patient outcomes, implementation of telehealth in healthcare delivery varied among healthcare payers.^{6,17-21}

During interviews, many HFPP Partners indicated that they use Medicare FFS as a guide and pay for a specified set of telehealth services in a narrow set of circumstances, such as:

1. The Originating Site in which the beneficiary is physically located while receiving telehealth services is a specified type of medical setting in a designated rural area or region with health professional shortages
2. The service is furnished by specific types of healthcare practitioners
3. There is an established patient/practitioner relationship
4. The service is furnished using real-time interactive media platforms with both audio and video communication.^{3,6,17-19}

Originating Site: The site at which the beneficiary is located when a healthcare service is provided via a telecommunications system.²²

Distant Site: The site at which the healthcare provider is located when a healthcare service is provided via a telecommunications system.²²

Furthermore, Medicare FFS telehealth services are considered to be furnished both where the patient and the remotely-located practitioner are located. Therefore, healthcare providers were required to be licensed or authorized under state law to furnish the specific services in both locations. The services approved for telehealth included office and outpatient evaluation and management (E/M), mental health, and substance abuse services.

Within the HFPP, some Partners were considered early adopters of telehealth, as they paid for certain telehealth services not traditionally covered by Medicare FFS.²³ For instance, before the PHE, these Partners offered services, such as a phone or tablet application for their members to connect to their healthcare providers, or provided services, such as doctors on call, which focused on primary care, general medicine, and acute care. In contrast, other HFPP Partners did not adopt telehealth until it became

a necessity during the PHE, due to various factors, including a lack of sophisticated infrastructure for connectivity, privacy, and broadband internet.^{24,25} Other key aspects that limited telehealth adoption for some payers before the PHE included:

1. Electing to adopt policies similar to the Medicare FFS program, in which telehealth services were paid for in limited circumstances
2. Concerns regarding overutilization of telehealth services
3. Billing and reimbursement challenges for telehealth services
4. Difficulties in credentialing and licensing of clinicians for telehealth
5. Variance in interpretation among payers related to telehealth policies within the privacy and security regulations promulgated under the Health Insurance Portability and Accountability Act of 1996 (HIPAA),^e as amended.^{23,26}

Expansion of Telehealth Services: Changes to Policies

While the telecommunication technology needed to provide telehealth services was not new, the adoption of telehealth in the healthcare industry was limited before the PHE.²⁶ At the onset of the COVID-19 PHE, declared by the U.S. Department of Health and Human Services (HHS) on January 31, 2020, various types of healthcare organizations were differently prepared to undertake the implementation of telehealth services.²⁷ In interviewing members of the HFPP, some had an existing infrastructure and plan for covering telehealth services, whereas others prioritized it after the PHE made delivering healthcare via telehealth a necessity.

In mid-March 2020, Congress, federal agencies, and the healthcare industry took major steps to expand access to telehealth services for Americans in an effort to remove barriers healthcare providers faced in delivering care via telehealth. Using waivers and other authorities, many restrictions that previously limited the use of telehealth services were lifted.²⁸ For example, CMS provided flexibilities related to the geographic location and type of health site through multiple waivers, which created payment parity between in-person and telehealth visits for Medicare.^{28,29} Similarly, Medicaid programs^f administered

Asynchronous communication is a type of communication that does not happen in real-time and uses forms or prerecorded information.³¹ There is a lag between when an individual provides the information and when the recipient reviews the information and provides a response. For example, an email exchange between a patient and their healthcare provider regarding a medical concern would be considered asynchronous communication.

Synchronous communication is a type of communication that happens in real-time. In the case of telehealth, synchronous communication between the patient and healthcare provider typically occurs via phone or video.³¹ The healthcare provider and the recipient of the information are in sync, and interactions are immediate.

^eHIPAA [Privacy](#) and [Security](#) Rules

^f[State Medicaid & CHIP Telehealth Toolkit](#): Policy Considerations for States Expanding Use of Telehealth; COVID-19 Version.

at the state levels could provide telehealth coverage as an alternate to in-person care.²⁸ HHS's Office for Civil Rights also issued a Notification of Enforcement Discretion for Telehealth Remote Communications during the COVID-19 PHE to empower covered healthcare providers required to comply with the HIPAA Privacy, Security, and Breach Notification Rules (HIPAA Rules) to use some common non-public facing remote communication technologies, such as Apple FaceTime, Facebook Messenger, and Google Hangouts, in addition to HIPAA-compliant video communication tools, like Zoom for Healthcare or Cisco Webex Meetings, to provide telehealth services.³⁰ Some HFPP Partner organizations also permitted healthcare providers to respond to patient concerns through asynchronous telecommunication systems, such as secure text messaging, electronic mail, or an online patient portal, as a mode of providing healthcare services.

Medicare Fee-for-Service

On March 31, 2020, CMS announced many new policies to help healthcare providers and hospitals rapidly deploy and accelerate service delivery through telehealth for Medicare FFS beneficiaries.³² These new policies built on the President's emergency declaration,⁹ the HHS Secretary's COVID-19 PHE declaration, the emergency waiver authority under §1135 of the Social Security Act,^h the Coronavirus Preparedness and Response Supplemental Appropriations Act, and the Coronavirus Aid, Relief, and Economic Security (CARES) Actⁱ to ensure that Americans, especially those at high-risk for COVID-19-related complications, stayed healthy while also reducing the community spread of the virus.³³ With a retroactive effective date of March 1, 2020, through the end of the COVID-19 emergency declaration, these emergency policies allowed for more than 100 additional services to be delivered through telehealth.^{29,33,34} Some of the waivers and other policy changes included as part of these efforts were:

- **Patient location:** Healthcare providers could offer Medicare telehealth services to patients located outside of the designated types of medical care sites and rural areas, including in patients' homes.
- **Types of healthcare providers:** Allowed additional types of healthcare professionals to furnish Medicare telehealth services.
- **Audio-only technology for some services:** Audio-only technology, including phone calls, could be used to furnish certain E/M services, behavioral health counseling, and health education services via telehealth.
- **Prior patient-provider relationship:** Healthcare providers could see both new and established patients via telehealth.
- **Place of Service (POS) Code:** Office-based physicians furnishing Medicare telehealth services were directed to use the POS code for the place where they would ordinarily furnish in-person services, which allowed them to be paid at the non-facility (office) rate for services delivered via telehealth.
- **Cost-sharing:** HHS-OIG would not enforce statutory provisions that otherwise might be invoked when healthcare providers routinely reduce or waive costs owed

⁹[Proclamation on Declaring a National Emergency Concerning the Novel Coronavirus Disease \(COVID-19\) Outbreak](#). March 2020.

^hCenters for Medicare & Medicaid Services. [Coronavirus Waivers & Flexibilities](#). June 2021.

ⁱ[H.R.748 CARES Act](#)

by federal healthcare program beneficiaries.^j

CMS also added a broad range of services as Medicare telehealth services, including emergency department visits, occupational, physical, and speech therapy, group psychotherapy, and outpatient E/M services.²⁹ While the care associated with some specialties is not included on the list of Medicare telehealth services because delivery by telehealth would not be clinically feasible or appropriate (e.g., surgical interventions), care focused on certain medication adjustment or preventive health discussions via telehealth is eligible for payment.

Medicare also increased payments for certain telephone-only E/M visit codes during the PHE to match payment for similar E/M services.³⁵ For example, for telephone E/M visits with Current Procedural Terminology (CPT®^k) codes 99421 (5–10 minutes), 99422 (11–20 minutes), and 99423 (20–30 minutes), CMS set payment rates to match those for similar in-person E/M services.³⁵ Moreover, the appended claims modifier 95 indicates that the billed service was rendered via telehealth.³⁵ In the 2022 Medicare Physician Fee Schedule Final Rule, CMS also stated that they adopted coding and payment for a longer virtual check-in service on a permanent basis.³⁶

Medicaid and the Children’s Health Insurance Program

In contrast to the Medicare program, which is administered by CMS, Medicaid and the Children’s Health Insurance Program (CHIP) are administered by individual states in accordance with federal requirements; therefore, coverage and payment rules may differ from state to state. During the PHE, most states covered services provided via telehealth through audio-only communications and that originated from sites other than traditional medical locations, such as patients’ homes.³⁷ States also expanded the range of Medicaid and CHIP services covered when provided via telehealth during the state or federal PHE. States are able to select from a variety of Healthcare Common Procedure Coding System (HCPCS) codes (T1014 and Q3014), CPT^l codes, and modifiers (GT, U1-UD) to identify, track, and reimburse for Medicaid and CHIP services delivered via telehealth.² It is worth mentioning that states have the discretion to choose if and how they track whether Medicaid and CHIP services are delivered via telehealth, but they are not required to do so.^m CMS developed a toolkitⁿ and supplement^o to help states with expanding coverage of Medicaid and CHIP services delivered via telehealth.³⁸ Some highlights from this toolkit include:

- **State flexibility regarding telehealth policies:** States have the flexibility to determine whether to cover Medicaid and CHIP services when they are delivered via telehealth and the payment rates for covered services delivered via telehealth.
- **State practice regulations:** States can reevaluate their scope of practice laws, including restrictions imposed by the state’s medical boards, to ensure telehealth can be utilized at its maximum.

^j[HHS-OIG Policy Statement](#) on Practitioners That Reduce, Waive Amounts Owed by Beneficiaries for Telehealth Services During the COVID-19 Outbreak
^kCPT codes, descriptions, and other data only are copyright 2021 American Medical Association. All Rights Reserved. Applicable Federal Acquisition Regulations (FARS) / Health and Human Services Acquisition Regulations (HHSARS) apply. Click [here](#) to learn more.

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^mAdditional information on [state telehealth laws and reimbursement policies](#) can be found at the Center for [Connected Health Policy](#).

ⁿ[State Medicaid & CHIP Telehealth Toolkit](#): Policy Considerations for States Expanding Use of Telehealth; COVID-19 Version.

^o[State Medicaid & CHIP Telehealth Toolkit](#): Policy Considerations for States Expanding Use of Telehealth; COVID-19 Version: Supplement #1

Private Payers

Although many private payers embraced telehealth as a mode of healthcare delivery, and many state boards of insurance mandated coverage of telehealth for these health plans, some states still do not have laws requiring commercial insurers to reimburse for telehealth, which can result in a patchwork system of care where access to telehealth depends on one's health insurance benefits and plan.³⁹ During interviews, HFPP private payer Partners discussed the flexibility in reimbursement criteria for various synchronous and asynchronous telecommunications. Some health plans required their healthcare providers to sign up to provide telehealth services, while other health plans automatically granted them the ability to provide telehealth for the duration of the PHE. Some Partners also waived member copays during the PHE. Whereas most states require private payers to reimburse for telehealth, some states also have parity laws that require private health plans to reimburse the same amounts for telehealth as a comparable in-person visit.

HFPP private payer Partners provided insight into what questions guided their telehealth coverage determinations. These included:

1. Is the healthcare service in question similar to another telehealth-approved service?
2. Is there evidence of clinical benefit to this service when performed via telehealth while reducing the risk of COVID-19 exposure?
3. Is the service clinically appropriate to be rendered via telehealth?
4. Is traditional in-person care more important than reducing the exposure risk to COVID-19 virus for a given healthcare need?

Flexibilities for Prescribing Controlled Substances

Multiple HFPP Partners discussed the prescribing of medications in the context of telehealth, in particular, as an area that is susceptible to high levels of fraud, waste, and abuse. This section provides an overview of the related flexibilities in policies during the PHE.

Beginning March 31, 2020, the Drug Enforcement Administration (DEA) amended policies to allow DEA-registered practitioners to prescribe Schedule II-V controlled substances via telehealth visits without an in-person medical evaluation during the PHE.⁴⁰ The DEA emphasized that practitioners must use sound judgment prior to prescription issuance to determine that the prescription is for a legitimate medical purpose in the usual course of professional practice.⁴¹ While some guardrails to prevent opioid misuse may have been logistically more challenging to coordinate through telehealth (e.g., urine toxicology screening), HFPP Partners emphasized that other existing guardrails to prevent opioid overuse or misuse were robust. This included requiring pharmacies to directly check the legitimacy of the Schedule II prescription with the prescribing healthcare providers, verifying those patients had a documented diagnosis related to the Schedule II medication, restricting patients to certain pharmacies for filling their opioid prescription,

and providing further assistance to their members to schedule drug screenings during the course of receiving Medication-Assisted Treatment. Furthermore, the DEA noted that during the PHE, practitioners must still adhere to all applicable state laws, which may include checking a state Prescription Drug Monitoring Program (PDMP), an electronic database that tracks prescriptions of controlled substances by state, during all applicable telehealth or in-person visits.⁴⁰

Comparing Telehealth Utilization from Pre-PHE to PHE

During the first year of the COVID-19 pandemic, over 28 million — more than 2 in 5 — Medicare beneficiaries used telehealth.⁴²

Since the outset of the COVID-19 PHE, the expansion of telehealth policies by federal, state, and private payers broadened telehealth to non-rural areas, permitted the use of popular telecommunications platforms, and reduced the cost sharing burden for patients. This facilitated increased utilization of telehealth during the PHE as reflected in the data provided by CMS for Medicare and Medicaid. For example, during the PHE, there was a 63-fold increase in Medicare visits through telehealth from 2019 (840,000 visits) to 2020 (52.7 million visits); moreover, nearly 43.5% of all Medicare primary care visits were delivered via telehealth in April 2020, compared to only 0.1% in February 2020, which was before the national emergency was declared by the President.⁴³ Similarly, Medicaid claims data indicate few telehealth claims before the PHE; claims received indicated that there were more telehealth claims in rural areas compared to urban areas.^{44,45} A Medicaid snapshot showed that there was an increase of 2,745% in services delivered via telehealth from March-October 2020 compared to the same period in 2019.⁴⁶ Similar trends were seen with the private payers as well, where the utilization of telehealth services increased significantly during the PHE, particularly in April, May, and June 2020 compared to the same months in 2019. Outlined in Figure 1, HFPP Partner-reported data for Medicare, Medicaid, and private payers combined also showed an increase in the total days in which healthcare was delivered via telehealth by a provider by 5,753% between February 2020 and April 2020.

Population-based studies reported that during the initial months of the COVID-19 PHE, individuals who are older, reside in rural communities, are Black or African American, Hispanic or Latino, or Asian American, have lower income, or are non-English speaking used fewer telehealth services, especially video visits.⁴⁷⁻⁴⁹ Furthermore, Medicare data from 2020 showed that White and urban Medicare beneficiaries had higher use of telehealth compared to Black or African American and rural beneficiaries, respectively.⁵⁰ Other studies found that individuals from minority and underserved populations have lower rates of engagement and utilization of telehealth, specifically among those residing in low-income zip codes and covered by Medicaid.⁵¹⁻⁵³ When looking at the use of telehealth throughout the first year of the COVID-19 PHE, the patterns shifted slightly. An analysis conducted by HHS-OIG that focused on Medicare FFS and Medicare Advantage data from March 2020 through February 2021 found that dually eligible, Hispanic or Latino, younger, female, and urban beneficiaries were more likely to use telehealth

than others.⁵⁴ Furthermore, other studies reported telehealth use increased with age, education level, income, and urbanization level.^{55–57} The utilization was also higher among women (compared to men) and non-Hispanic White (compared to Hispanic, Black, and Asian) adults.^{55–57} These population-based studies demonstrate the relationship between disparities in social determinants of health and telehealth utilization.

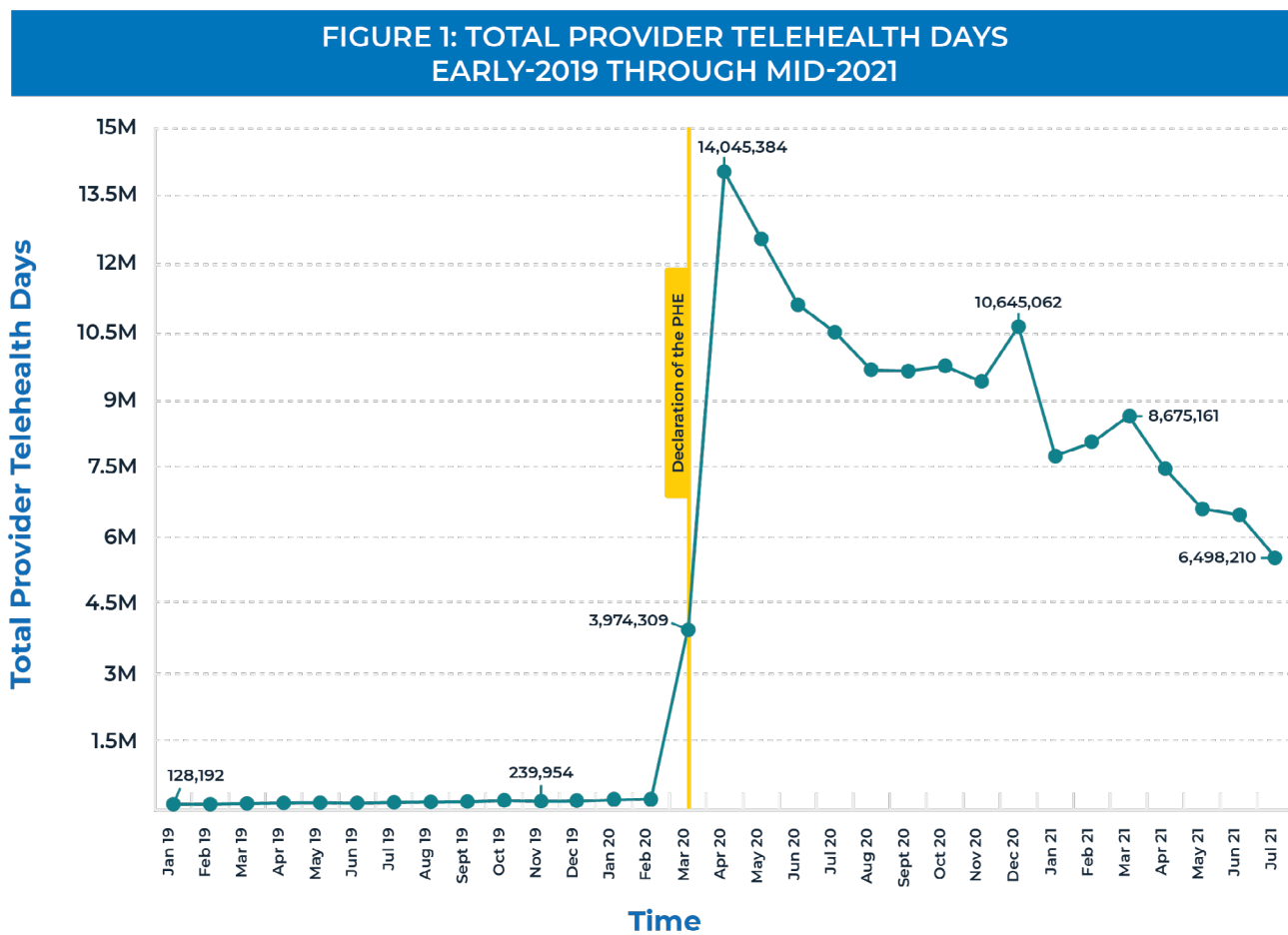


Figure 1: Total Provider Telehealth Days, Early-2019 (Pre-PHE) Through Mid-2021 (PHE). Analyzed using the HFPP’s federal, state, and private Partner data.^P

Telehealth utilization for Medicare beneficiaries prior to the PHE was highest in states with higher concentrations of rural areas – a trend that was expected due to the geographic limitations on telehealth in urban areas.⁵⁰ As a result of new Medicare flexibilities during the PHE, telehealth utilization increased nationally in 2020 and 2021, and states with higher concentrations of urban areas, such as the Northeastern and Western parts of the U.S., observed the largest increases in telehealth usage compared to Pre-PHE figures.^{50,55} Based on the percent of total Medicare FFS visits in 2020, states with the highest telehealth utilization included Massachusetts, Vermont, Rhode Island, New Hampshire, Connecticut, and California, while states with the lowest telehealth utilization included North Dakota, Kansas, Nebraska, Wyoming, and Tennessee.⁵⁰ These utilization differences in states may be due to a combination of factors, such as variation in state telehealth policies during the PHE, as well as provider capacity and readiness to rapidly expand telehealth in their practices.⁵⁰

^PThis study used modifier codes that indicate telehealth services – specifically modifiers 95, GQ, GT, and G0. If any of these modifiers were included in the modifier fields for a service, then the service is categorized as a telehealth service.

TELEHEALTH: BENEFITS AND BARRIERS

Despite efforts to remove barriers in healthcare access for certain communities, health disparities in care delivery still exist in the U.S. For example, individuals of racial and ethnic minority backgrounds face greater barriers in accessing healthcare and are more likely to receive poorer quality care, compared to individuals from non-minority backgrounds, based on available data, including quality measures reported by the Agency for Healthcare Research and Quality (i.e., patient safety, person-centered care, care coordination, effective treatment, healthy living, and care affordability).^{58,59} Lack of transportation, high costs, and healthcare provider unavailability block certain communities from receiving necessary and appropriate care.⁶⁰ As such, telehealth provides a unique opportunity to increase access to care among communities that face barriers in receiving traditional in-person care. Additional benefits of telehealth include^{61,62}:

- Reducing patient travel burden and costs (e.g., transportation, gas, parking, childcare, elder care, time off work)
- Overcoming clinician shortages in rural and underserved communities
- Enabling patients with medical conditions that put them at an increased risk of getting sick from COVID-19 to continue to safely receive medical care without needing to leave their homes
- Allowing healthcare providers to assess patients' home environment and their families
- Preventing the spread of and exposure to infectious diseases (e.g., COVID-19)

HFPP Partners that were interviewed stated that telehealth has allowed healthcare providers to maintain continuity of, and access to, care with their patients during the PHE. During these conversations, some HFPP Partners that waived or reduced cost-sharing for telehealth visits noticed that it enabled many of their members who could not afford copays to receive appropriate and timely healthcare.^{63,64} Many studies have shown an increase in preventive services utilization when cost-sharing is waived, especially COVID-19 testing and treatment, cancer screening (e.g., colorectal, breast, cervical), and mental health care.^{63,65-68} Some Partners also noted that telehealth led to less delay between when a patient decided to seek care and met with a healthcare professional, as well as reduced emergency room visits, appointment cancellations, and no-shows.

During interviews, HFPP Partners commented that telehealth has the potential to improve access to healthcare and ensure equal access to quality care if implemented and delivered equitably. If concerted efforts are not made to address and understand the disparities some communities face in receiving care via telehealth, it is likely that pre-existing disparities will persist for certain populations, such as individuals with hearing loss, limited English proficiency, or limited access to the internet or technology, as well as

older adults that have chronic illnesses.⁶⁹ Here, we conceptualize the multi-level factors that impact healthcare access and delivery via telehealth.

Patient-Level Barriers

HFPP Partners mentioned that a gap in access to communications infrastructure (e.g., internet, computer), devices with Bluetooth or Wi-Fi connectivity (e.g., medical devices that connect to a consumer's phone), digital literacy (i.e., experience using computing technology), or assistive equipment or technology (e.g., closed captioning, video interpretation services) among certain groups of individuals can create barriers to connect virtually with their healthcare provider.⁷⁰ Recent studies have shown that older adults, Black or African American patients (vs. White), and patients with Medicare and Medicaid (vs. commercial insurance coverage) are populations less likely to have internet access and digital literacy; consequently, these groups are less likely to use video visits compared to telephone visits.^{71,72} Individuals with limited English proficiency, who are experiencing homelessness, or are without a private or safe space to participate in virtual visits with their healthcare providers are also less likely to complete video visits.^{72,73} Hence, an emphasis on technological equity to expand access has become an important part of health equity endeavors.⁷⁴ Additionally, virtual health visits can make it challenging for a patient to build a rapport with their healthcare providers due to the lack of physical presence or the ability to read social and physical cues through a virtual screen, especially when receiving behavioral health services.^{75,76} One HFPP Partner discussed during their interview that their beneficiaries in government healthcare programs have higher healthcare needs compared to individuals in their commercial lines of businesses. This Partner also noted that telehealth may not be well suited to ensuring quality care for complex and comorbid health statuses.

Provider-Level Barriers

Some healthcare providers may not have the telecommunications infrastructure capacity or patient monitoring capability to offer telehealth services.⁷⁷ When offered, telehealth limits a healthcare provider's ability to perform a physical exam.⁷⁵ In addition, lighting, connection issues, and video quality can affect the usefulness of the exam for making diagnoses or treatment decisions.^{78,79} Healthcare providers have expressed concern for the lack of clinical guidelines and quality measures to deliver care using telehealth safely and effectively.⁸⁰ Physicians are also concerned about losing personal connections and physical touch while caring for their patients, which can hinder building strong physician-patient relations.⁶² Furthermore, physicians have reported that certain objective measures of care quality, such as blood pressure, glucose, or cholesterol measurements, may decline in quality and frequency as they have to rely on patients to report and maintain their vitals through home monitoring devices during telehealth visits.⁸¹ Ultimately, clinical workflows designed for traditional in-person visits need to be optimized for telehealth visits, as well as for the seamless integration of team-based care into the new care delivery model.⁵² The integration of telehealth services into traditional workflows may encounter implementation challenges and resistance that will require effective change management, team and provider engagement, coordinating telehealth operations, monitoring flow of patients, and measuring outcomes.⁸²⁻⁸⁴

System-Level Barriers

At the system-level, payment models that prioritize in-person visits and provide lower payment for telehealth visits may penalize organizations that care for underserved, rural, and low-income populations, consequently discouraging telehealth use.⁵² For example, HFPP Partners mentioned that payment differentials for telehealth visits based on patient location compared to the healthcare provider location may incentivize providers to deliver care to patients living in regions with a higher payment rate or disincentivize providing care for patients living in regions with a lower payment rate. This locality differential can also create a loophole for bad actors to commit fraud, waste, and abuse where a potentially fraudulent healthcare provider may submit a claim to deliver care using a high locality differential to obtain additional revenue from the service billed.

VULNERABILITIES IN TELEHEALTH

Telehealth has the potential to increase access to care; however, it is also vulnerable to fraud, waste, and abuse schemes, similar to traditional in-person care delivery. Many restrictions that applied to telehealth use in federal and state programs were relaxed during the PHE, and bad actors took advantage of these changes, which were implemented to prevent the spread of COVID-19. With increased telehealth activity, the likelihood of telehealth-related fraud also increased.⁸⁵ This section reviews the significance and prevalence of telehealth fraud, waste, and abuse and related schemes highlighted during HFPP Partner interviews.

Significance of Fraud, Waste, and Abuse Related to Telehealth

Before the PHE, many payers had policies or guidelines in place that restricted the use of telehealth to very limited circumstances. At the onset of the PHE, many of the restrictions that applied to telehealth use in federal programs were relaxed to provide healthcare to those in need while preventing the spread of the COVID-19 virus. These actions, and similar ones taken by the states and private payers, helped to eliminate many barriers to healthcare access; however, bad actors are aware of these PHE flexibilities and associated increase in telehealth utilization. To take advantage of the growing acceptance and use of telehealth, bad actors have often repurposed previously existing fraud, waste, and abuse schemes or created new ones.⁸⁶

HFPP Partners listed primary care, E/M services, behavioral health, physical therapy, occupational therapy, and speech therapy as specific service areas of concern for fraudulent activity. Some common schemes include bundling of codes, billing for services not rendered, and acquiring member or patient identification information to perpetrate identity fraud. (See section “Fraud, Waste, and Abuse Schemes” for more details on these schemes and their relation to the service areas of concern listed above.) HFPP Partners also shared that fraud, waste, and abuse in telehealth can create the potential for physical and non-physical (e.g., financial) harm to patients.

The HFPP Partners that were interviewed also raised concerns that if cost-sharing is waived or reduced, bad actors may take advantage and bill more often, sometimes without the beneficiary noticing, which can contribute to overutilization and over-prescribing of care. During the interviews, HFPP Partners specified that schemes that lead to over-prescribing of controlled substances, opioids, or non-medical grade DME, as well as amending the prescriptions without physically assessing a patient, can cause harm to the patient. For example, receiving inappropriate medications in the mail through a telemarketing scheme, perpetrated in association with telehealth, may cause a severe allergic reaction or worsen a pre-existing condition. HFPP Partners shared concerns about pain management providers potentially trying to see an inordinate number of patients in a day via telehealth. They worried these healthcare providers may not be able to determine if the patient really needs a controlled substance as a pain

medication, may forgo requiring urine drug screens, or may be inhibited from developing a trusting relationship with the patient to understand medication compliance.

In addition to physical harm, fraud, waste, or abuse schemes can also increase the risk for identity theft and financial harm. The HFPP Partners that were interviewed raised concerns and described schemes related to telehealth in which identity theft may occur. For example, schemes referred to as “telefraud” are scams that leverage aggressive telemarketing to offer unnecessary services or products under the guise of providing telehealth services. One way in which this was described was that unscrupulous telehealth providers and companies may illegally acquire beneficiary information and call the beneficiary to offer these medically unnecessary services or submit fraudulent claims.

Individuals who are victims of a fraudulent scheme may also be responsible for payment for a service that was not previously approved by their healthcare payer. One example, outlined by HFPP Partners during interviews, is that under the guise of providing telehealth care, fraudsters may call a patient and offer a genetic testing benefit. The patient believes this is a legitimate telehealth service and is unaware that it is considered a one-time benefit. In this scheme, the patient may incur high expenses associated with genetic testing if their healthcare payer did not provide prior authorization, and the patient may also be prevented from using this benefit at a later time if it becomes medically necessary. Therefore, the effects of fraud, waste, and abuse schemes disguised as telehealth services can financially harm an individual and impact their access to care. Furthermore, studies have shown that older patients may become more cautious about, or develop distrust in using, telehealth and other online health information due to concerns about fraud – consequently refusing or abandoning the use of telehealth applications.⁸⁷

Federal, state, and local government healthcare programs and commercial insurance companies can also lose billions of dollars due to telehealth fraud, waste, and abuse schemes.^{88,89} These schemes can burden the U.S. healthcare system with unnecessary costs, impose higher premiums or out-of-pocket expenses on the members, and impact the fiscal sustainability of federal health programs. They also raise concerns of patient harm and quality of care.¹⁴

Prevalence and Drivers of Fraud, Waste, and Abuse in Telehealth

Although telehealth has the potential to increase access to care, it is also vulnerable to fraud, waste, and abuse schemes similar to traditional in-person care delivery. Thus, it is important to understand the prevalence, drivers, and vulnerabilities in telehealth.

With an increase in the delivery of care using telehealth, there are now additional opportunities to both repurpose existing schemes and develop new ones to commit fraud, waste, and abuse. HFPP Partners mentioned that some healthcare providers may have taken advantage of enhanced payments (e.g., previously existing locality differential in reimbursement), as well as loosened telehealth policies (e.g., waiver of prior patient-provider relationship) during the PHE, leading to fraud, waste, and abuse. Further, an analysis conducted by HHS-OIG of Medicare telehealth services billed from March 2020 through February 2021 looked at seven indicators⁹ associated with a higher risk

of potential fraud, waste, and abuse.⁴² Using high inclusion thresholds, HHS-OIG found that out of 742,000 providers who billed Medicare for telehealth services, 1,714 providers were identified to have submitted billing with at least one of these seven^q flagged indicators.⁴² This small subset of providers, who HHS-OIG indicated warranted further analysis for potential fraud, waste, or abuse, had billed Medicare for telehealth services for approximately half a million beneficiaries and received more than \$127 million in Medicare FFS payments.⁴² During interviews, HFPP Partners stated that, similar to in-person healthcare delivery, the primary motivation for fraudsters is monetary benefit. These Partners additionally noted that the healthcare providers who commit fraud, waste, and abuse may incorrectly assume that, due to the relaxation of rules during the PHE, payers and government agencies are not policing the issues as vigorously.

During interviews, HFPP Partners observed that within their organizations, fraud, waste, and abuse in telehealth may be more prevalent in the eastern half of the U.S. (e.g., New York, Pennsylvania, Florida, Indiana, Ohio), as well as in Texas.^r Interviewed Partners indicated that based on their observations, people who are 65 years and older and people in the low socioeconomic scale are more likely to be targets for schemes in telehealth. HFPP Partners reasoned these populations are less likely to review their claims and raise alarms of questionable activities, and some may have limited ability to access this information online. The Partners added that these populations are also more likely to be dually eligible for Medicare and Medicaid, have flexible and open health benefits design, and have a higher healthcare utilization, which increases the likelihood of being targets for fraud, waste, and abuse schemes. Furthermore, one HFPP Partner stressed that when enforcement was paused on statutory provisions that normally prevent healthcare providers from reducing or waiving costs owed by beneficiaries, members are less likely to complain about questionable billing; thus, the first line of potential “whistleblowers” remains silent. These factors can increase the opportunities to commit fraud, waste, and abuse in telehealth.

Fraud, Waste, and Abuse Schemes Related to Telehealth

This section reviews the primary, or most significant, fraud, waste, and abuse schemes related to telehealth highlighted during the HFPP Partner interviews in Fall 2021.

Billing and Coding

HFPP Partners stated that at the time of their interviews, the largest amount of telehealth fraud, waste, and abuse occurred through incorrect coding and billing. An analysis conducted by six OIGs also sheds light on potential billing practices that may have been used by providers to inappropriately maximize their payments for telehealth services.⁹⁰ The billing and coding schemes described in this analysis, as well as HFPP Partner interviews include:

- Incorrect coding or modifiers (e.g., billing with the wrong POS Codes or modifiers)

^q [Infographic for Medicare Telehealth Services During the First Year of the Pandemic: Program Integrity Risks](#). Examples of seven measures that may indicate fraud, waste, and abuse in telehealth services were billing both a telehealth service and a facility fee for the same visit, billing telehealth services at the highest most expensive level, and billing for high average number of hours of telehealth services per visit.

^r For instance, a 2021 [DOJ report](#) announced criminal charges and law enforcement actions to combat healthcare fraud related to telehealth in the Southern District of Florida.

- Upcoding to a higher level of service than rendered or to the most expensive level of services (e.g., upcoding individual therapy and billing for family therapy)
- Using unreasonable time-based codes (e.g., extensive face-to-face visits; billing for two hours of reviewing patient notes, labs, or results; billing for an intensive 45-minute virtual therapy session with a young child)
- Billing for services provided by interns under the National Provider Identifier of a licensed healthcare provider without prior approval or documentation
- Upcoding claims codes that do not match the CPT⁵ or HCPCS procedures or providing basic services and billing for more complex visits (e.g., a 15-min virtual check-in visit is billed as a complex 45-minute higher-level telehealth visit)
- Blanket billing (e.g., billing all patients for the same services when different services were provided)
- Billing for specialties seemingly not appropriate for telehealth (e.g., anesthesiology)
- Billing for medically unnecessary services (e.g., excessive lab testing, medications, or DME) without assessing the patient’s medical needs

“Improbable” Days

One telehealth fraud, waste, and abuse scheme that attracted the attention of the majority of HFPP Partners that were interviewed was the occurrence of billing for “improbable” hours (e.g., 28 billing hours in a 24-hour day). With the growing acceptance of telehealth among patients and ease in being able to rapidly transition from one patient to the next, healthcare providers can see and care for more patients compared to traditional in-person visits. However, some healthcare providers take advantage of the system and use extended time codes or bill for fraudulent claims that can add up to “improbable” hours that are not feasible for a single rendering healthcare provider. Figure 2 shows the HFPP cross-payer data from early-2019 to mid-2021 depicting a drastic increase in the total number of “improbable” days at the outset of the PHE.[†] Compared to pre-PHE, the overall amount of potential healthcare fraud associated with “improbable” days grew during the PHE and may be related to the increased use of telehealth services. HFPP Partners also identified that many healthcare providers will participate in multiple payers’ provider networks at a given time; thus, unscrupulous healthcare providers could potentially bill multiple individual payers more hours in the same day for services rendered via telehealth (e.g., 3 hours to Payer A, 6 hours to Payer B, 3 hours to Payer C, 5 hours to Payer D, and 3 hours to Payer E for a total of 20 hours in a day), which is unlikely and can negatively impact the healthcare system.

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[†]This analysis does not account for potential effects associated with a billing practice known as “incident to” billing. “Incident to” billing allows for services provided by clinical staff who are directly supervised by a practitioner to be billed under the supervising practitioner’s identification number. For more information on how “incident to” billing poses challenges for telehealth program integrity see the HHS-OIG report [“Medicare Telehealth Services During the First Year of the Pandemic: Program Integrity Risks \(OEI-02-20-00720\).”](#)

**FIGURE 2: TOTAL IMPROBABLE TELEHEALTH PROVIDER DAYS
EARLY-2019 THROUGH MID-2021**

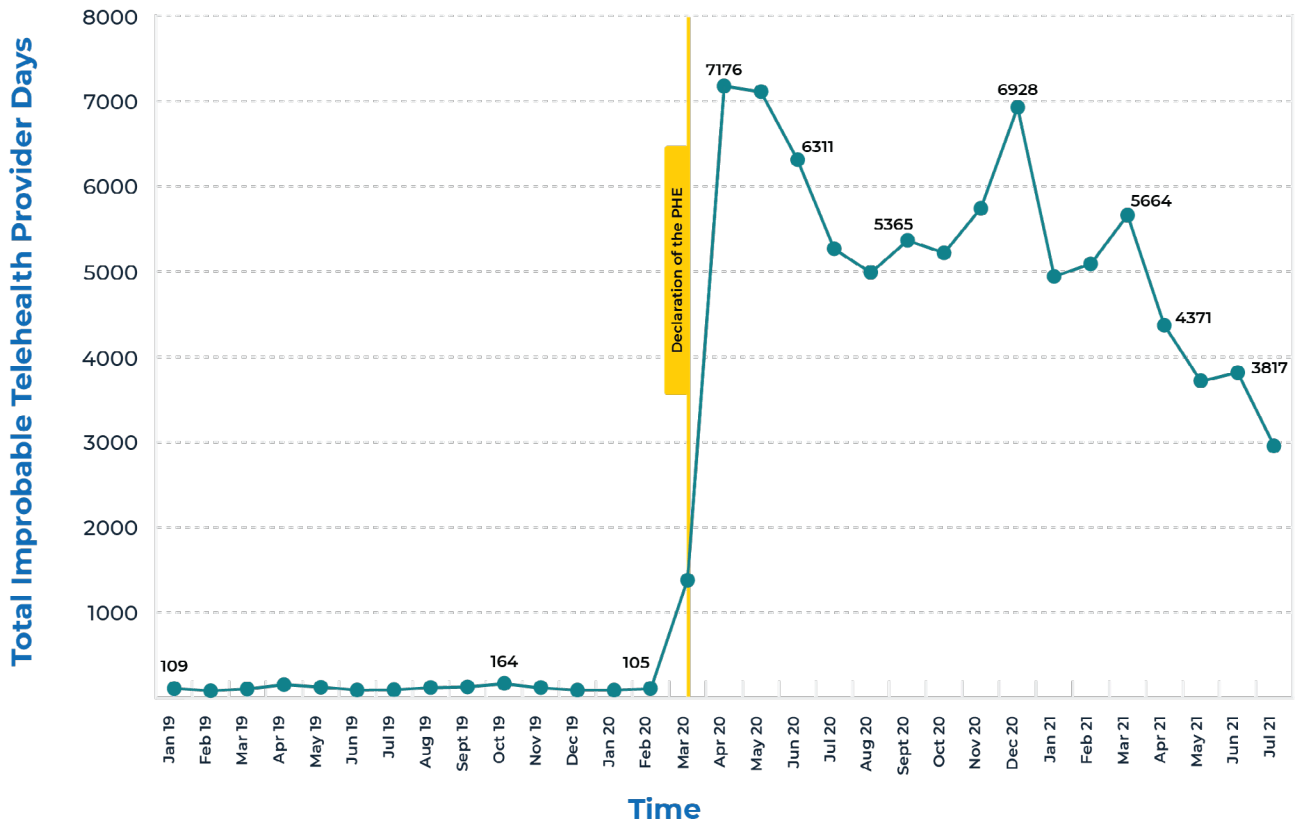


Figure 2: Total Improbable Telehealth Provider Days, Early-2019 (Pre-PHE) Through Mid-2021 (PHE). Analyzed using the HFPP’s federal, state, and private Partner data.

COVID-19-Related Services Delivered via Telehealth

HFPP Partners also shared telehealth schemes associated with COVID-19-related services, such as COVID-19 testing, diagnosis, and vaccination during the PHE. According to the HFPP Partners that were interviewed, some telemarketers may have exploited the PHE for financial gains by targeting certain beneficiaries deemed vulnerable for various reasons. These schemes include offering the beneficiaries personal protective equipment (PPE), vaccines, genetic tests for COVID-19 predisposition, testing, etc., related to COVID-19, and, later, either billing these interactions as a telehealth visit or stealing personal information from members or beneficiaries who are unaware of their health benefits. Examples of telehealth schemes associated with COVID-19-related services include healthcare providers diagnosing COVID-19 virtually, billing for excessive COVID-19 diagnostic testing, as well as sharing COVID-19 diagnostic test results with patients and billing as an office visit on claims to receive enhanced payments. Furthermore, bad actors exploit policies in place to enable increased access to care during the PHE, such as a kickback scheme, which involves a healthcare provider billing for sham telemedicine encounters and ordering unnecessary genetic testing in exchange for access to telehealth patients.⁹¹

Telefraud

Schemes involving telemarketing or other recruitment companies are often referred to as “telefraud,” which are scams that leverage aggressive telemarketing and so-called telehealth services to offer unnecessary or fraudulent services or products.¹³ Telefraud may include exploiting policies to target vulnerable beneficiaries to offer medically unnecessary services and gain access to personal health or insurance information. Fraudsters then use the information to generate fraudulent orders for DME services, fake or unnecessary genetic testing, unnecessary laboratory tests, etc. HFPP Partners noted that these fraudsters offered participation in fraudulent research studies, non-existent or medically non-compliant treatments, unnecessary supplies (e.g., braces, supplements, topical creams, etc.), or other services (e.g., COVID-19 vaccine or testing). It is worth noting that telehealth visits associated with these types of schemes may not represent legitimate medical care or services and raise potential concerns of patient harm and quality of care.¹⁴ HFPP payer Partners raised concerns when they noticed they were billed for items and services, such as a topical cream, for their members that were medically unnecessary or conflicted with their member’s current medical treatment plan. Additionally, HFPP payer Partners indicated receiving claims for these expensive products when, in fact, the provider never sent anything to their member. A few HFPP payer Partners also noted concerns that some healthcare providers may be unknowingly targeted and recruited into these fraudulent schemes, such as being offered payment for each order or prescription.

Durable Medical Equipment

During interviews, many HFPP Partners described DME benefits as another major area of concern for telehealth fraud, waste, and abuse. Beneficiaries receive unsolicited outreach (e.g., phone call, email, social media) from telemarketing companies to persuade them to order medically unnecessary equipment (e.g., braces, orthotics), and bill their health plans without first establishing a provider-patient relationship or properly assessing the need for these services. Here, it is important to note how this scheme begins with telefraud and is not considered a valid telehealth service. HHS-OIG investigates fraud schemes that inappropriately leverage telemarketing schemes with unscrupulous healthcare providers to conduct sham telehealth visits to increase the perpetrator’s criminal operations.⁹² In many cases, these healthcare providers do not bill for the sham telehealth visits but fraudulently bill for other services or items, such as DME. HFPP Partners added that, many times, the equipment delivered in these schemes is of poor quality or never sent at all to the beneficiaries as described above. DME fraud, waste, and abuse, in the form of telemarketing calls, is concerning for the majority of the HFPP Partners due to the potential for identity fraud and identity theft, especially when the services were not rendered, or items were not sent to the beneficiary.

IDENTIFYING AND MITIGATING FRAUD, WASTE, AND ABUSE IN TELEHEALTH

HFPP Partners have a variety of fraud, waste, and abuse identification and monitoring protocols in place, such as data mining and cross-collaboration among industry, government, and law enforcement organizations. HFPP Partners also mentioned that telehealth fraud, waste, and abuse schemes are sometimes uncovered while investigating another matter, which provides an opportunity for investigators to uncover other schemes. For example, an HFPP Partner shared that while investigating a DME fraud, waste, and abuse case, they uncovered that telehealth fraud was at the root of the scheme. Other methods of identifying and mitigating telehealth fraud, waste, and abuse discussed during the interviews included following up on reports and referrals received from tip lines, implementing provider-based fraud prevention programs, and educating their members.

Referrals and Hotlines

HFPP Partners use referrals from the public, beneficiaries, members, or healthcare providers to gather information about potential fraud, waste, and abuse. HFPP Partners' internal departments and law enforcement agencies also allow people to report fraud, waste, and abuse to their Special Investigations Unit (SIU) or compliance hotlines via phone calls, emails, or mailings. Additionally, HFPP Partners conduct patient and provider interviews that sometimes uncover fraudulent schemes. In combination, this information can enhance investigative efforts and lead organizations to cross-check it with their claims data analytics.

Data Analytics

Many HFPP Partners reported that they emphasize reviewing claims and having strong data analytics that can proactively detect and monitor emerging fraud, waste, and abuse schemes. During the interviews, these HFPP Partners stressed the importance of verifying the following during claims review and data analytics:

- The primary healthcare provider on the claim and their previous billing history (i.e., frequency of billing, and prior history of potential fraudulent, wasteful, or abusive behavior)
- Place of service and an appropriate modifier
- Telecommunication platform for a telehealth visit
- Duration of the session
- Prior approval of the procedure for telehealth
- Prior patient-provider relationship

- Geospatial comparison for the healthcare provider and patient location
- Peer and specialty comparison of CPT^u codes for a given region to detect unusual billing practices

Some HFPP Partners mentioned that they proactively data mine for certain codes to check for overutilization or outliers in provider billing. These Partners use predictive analytics, artificial intelligence, and machine learning to create telehealth data dashboards to track fraud, waste, and abuse. These analytics and algorithms are constantly evolving to incorporate new trends and consider any sudden deviations, such as changes in billing practices, year-to-year telehealth utilization comparison, trends in billing during the PHE, irregularities in the data, unusual spikes in patient volume for a healthcare provider, unusual spikes in time spent per patient, and any unusual spikes in the total dollar amount billed. Although artificial intelligence and machine learning algorithms are not yet implemented universally across the healthcare industry to detect fraud, waste, and abuse, HFPP Partners who already utilize the technology strongly stated that it can help detect suspicious activities in billing practices at an early stage. Other reports and studies have also shown the effectiveness of using advanced analytics, predictive analytics, artificial intelligence, and machine learning technologies to uncover fraudulent activity by expediting investigations and subjectively sifting through large volumes of raw data.^{93,94}

Databases, Electronic Health Records, and Other Data Sources

When looking to identify fraud, waste, and abuse, HFPP Partners discussed the importance of leveraging information from external sources, such as the results of HFPP study analytics^v (accessible to all HFPP Partners) and the PDMP's database (accessible to law enforcement). These sources can assist an organization in better understanding provider behavior and identifying those who might need to be further investigated based on outlier billing patterns and practices, utilization rates, opioid prescribing patterns, etc. Additionally, some Partners suggested the use of medical records or electronic health records (EHRs) to perform quality checks and identify fraud, waste, and abuse before it becomes a bigger issue. An HFPP Partner also stated it uses news media reports to identify potential fraudulent healthcare providers or schemes, which helps kickstart an investigation. Furthermore, some Partners stated during the interviews that they use social media to identify new schemes on the internet that target individuals who are considered vulnerable by offering them fraudulent healthcare services in the guise of telehealth. These Partners also used social media to check for unusual patterns around how suspicious healthcare providers are acting on social media to see if they warrant further investigation.

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^vThe HFPP cross-Partner health claims database provides an opportunity for Partners to submit their claims data, which is de-identified and then made available for HFPP-led studies, including the identification of trends in telehealth fraud, waste, and abuse among private payers, Medicare, and Medicaid.

Provider-Based Prevention Programs

HFPP Partners discussed two types of healthcare provider-based fraud prevention programs that can help mitigate fraud, waste, and abuse. First, some HFPP Partners provide educational opportunities regarding proper claims submission and billing practices for their healthcare providers and providers' staff coders. This education can be in the form of calls, letters, webinars, or training to discuss the appropriate claims submission criteria, documentation, and procedures. HFPP Partners stated that this information can help reduce billing errors, prevent wasteful spending, and help healthcare providers correct their erroneous claims. Likewise, since healthcare providers can also be recruited unknowingly into fraud, waste, and abuse schemes by fraudulent telehealth companies, HFPP Partners suggested that healthcare providers are educated on common telehealth fraud, waste, and abuse schemes and how to not get unknowingly recruited into these schemes. HHS-OIG also released a special fraud alert, which encourages practitioners to exercise caution when entering into arrangements with purported telemedicine companies and provides ways to spot and avoid being involved in fraudulent schemes.⁹⁵

Second, during the interviews, HFPP Partners discussed the importance of pre-pay claims reviews (i.e., claims for a provider or facility that are reviewed by a payer before payment is made) for certain suspicious healthcare providers to prevent losses upfront. Many payer payment integrity strategies are focused on post-payment reviews to ensure healthcare providers are being appropriately paid for the services that are medically necessary; however, some payers have shifted to pre-pay reviews to improve claim accuracy and prevent fraud, waste, and abuse.⁹⁶ Pre-pay reviews reduce the administrative burden of payment recovery and can help identify improper payments before they are made to the healthcare providers.⁹⁶

Patient Education

In addition to healthcare provider education, many HFPP Partners emphasized the benefits of member or beneficiary education programs about telehealth fraud. Many HFPP Partners provide member education via mail and email to caution their members about receiving phone calls from fraudulent companies offering genetic testing or DME and associated supplies. Members of the Partnership that were interviewed stated that it is crucial to reach out to populations that are at increased risk, such as older adults or Medicare and Medicaid beneficiaries, to caution them about these schemes. For example, to assist beneficiaries of federal health programs in identifying fraudulent communications from telemarketers or medical providers, HHS-OIG developed a resource, "Tips for Federal Health Care Program Beneficiaries," which is publicly available on their website.^v These Partners indicated that they educate their members on how to review their Explanation of Benefits (EOB) and their claims history. With this, they also include information about how to submit a complaint if they believe their claims do not match the services rendered on their EOB to their insurance company or through a hotline, such as 1-800-Medicare, the HHS-OIG tip line, or the Federal Bureau of Investigation (FBI) tip line. Furthermore, some HFPP Partners provide a list of suggested

^vA broad range of information related to coverage, oversight, and schemes around telehealth services in Medicare and Medicaid is available from [Telehealth](#) Featured Topics section of HHS-OIG's website.

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companies or in-network providers, which members can use to help avoid becoming targets of fraud.

Cross-Disciplinary Collaboration and Data Sharing

HFPP Partners stated that collaboration with other organizations and agencies, such as federal and state law enforcement, state healthcare professional licensing boards, industry partners (e.g., telehealth companies, pharmacies, DME suppliers), and anti-fraud associations (e.g., the HFPP, the National Health Care Anti-Fraud Association [NHCAA], Coalition Against Insurance Fraud, National Association of Drug Diversion Investigators), helps build a collaborative network to share emerging trends in fraud, waste, and abuse schemes in telehealth. Specifically, HFPP Partners emphasized the importance of information sharing among payers and law enforcement to help inform one another and adapt policies and mitigation tools for new telehealth schemes. For example, if one payer shares that there is a scheme that includes overutilization of a particular code, another payer can proactively institute data mining to see if the same is prevalent among their healthcare providers. HFPP Partners added that agencies and organizations, such as CMS, HHS-OIG, the HFPP, and the NHCAA, help them stay current through data alerts and newsletters regarding emerging trends in fraud, waste, and abuse within telehealth. For example, Partners appreciated the HFPP cross-payer data sharing, analysis, and studies that help them identify new trends in telehealth and potential for any fraudulent schemes. Other Partners discussed having a strong collaborative relationship with their interdisciplinary internal teams (e.g., analysts, civil litigators, auditors, attorneys, quality improvement, utilization review, healthcare providers), which helps in the development of innovative fraud detection tools. Lastly, these HFPP Partners mentioned that relationships with policymakers can support policymaking in telehealth, as well as identification and monitoring of related fraud, waste, and abuse.

TELEHEALTH FRAUD, WASTE, AND ABUSE ENFORCEMENT

With the changes in telehealth policies during the PHE and the rise in related fraud, waste, and abuse, telehealth has become an area of attention for regulators and law enforcement. There are many federal laws that specify criminal, civil, and administrative penalties and/or remedies with respect to individuals or entities determined to have committed fraud or abuse in federal health programs, such as Medicare and Medicaid, as well as other healthcare programs. Violating these laws can result in civil monetary penalties, non-payment of claims, exclusion from all federal health programs, civil liability, or criminal liability. The list below provides a general description of these laws, as well as legal consequences if one is found guilty, liable, or in violation.¹⁰

- **Federal Civil False Claims Act:** Imposes civil liability on any individual who knowingly submits or causes the submission of a false or fraudulent claim to the federal government. For example, if a physician knowingly submits a claim to Medicare for a service not rendered, they may face financial penalties.
- **Federal Anti-Kickback Statute:** The federal Anti-Kickback Statute is an intent-based, criminal statute that, as a general matter, prohibits payments in exchange for referrals or other federal healthcare program business. Violation of the statute constitutes a felony, punishable by fines, imprisonment, or both. Prohibited conduct also may lead to the imposition of civil and administrative sanctions, which may include civil monetary penalties and exclusion from participation in federal healthcare programs. For example, when a healthcare provider receives below-fair-market-value rent for medical office space or cash in exchange for referrals, they may face liability.
- **Physician Self-Referral Law (Stark Law):** Imposes penalties on a physician for referring a patient for the furnishing of a “designated health service” payable by Medicare to an entity with which they have a familial or financial relationship unless an exception applies. This law also prohibits submission of claims in violation of the law’s restrictions on referrals and can impose penalties on physicians who violate this law.
- **Criminal Health Care Fraud Statute:** Imposes penalties or imprisonment on an individual who knowingly or willfully executes or attempts to execute a scheme related to delivery or payment of healthcare benefits or services to obtain money or defraud a healthcare benefit program.

It is important to note that those HFPP Partners who were interviewed mentioned that investigations are initiated by payers after a careful review of, among other things, the intent of the action, the type of scheme, the frequency of the action, and the financial implication of the scheme on the payer or the beneficiaries. For instance, in the case of an infrequent billing error that appears to be unintentional, a payer may first provide education to healthcare providers and coders to prevent such mistakes from happening

in the future and require repayment on any billing errors; however, should such billing errors persist after providing initial education or wrongful intent is demonstrated in the internal investigation, a payer might elect to report those healthcare providers to law enforcement.

Before the PHE, law enforcement efforts in telehealth were directed at telefraud, which leveraged telehealth platforms to sell expensive, medically unnecessary products, such as DME, lab services, or genetic testing, and billed federal and state health programs for reimbursement. With the necessity of telehealth services increasing during the PHE, healthcare programs expended vast amounts of money on services delivered via this method. Thus, law enforcement expanded their investigations and enforcement efforts to encompass fraud, waste, and abuse activities that are exploiting policy and regulatory changes that were implemented by CMS and other payers to support the broader delivery of care through telehealth.⁹² Although law enforcement agencies are still investigating, auditing, and evaluating telehealth services for 2021, below are some payer-led corrective actions and law enforcement operations for telehealth fraud, waste, and abuse from 2019-2021.

Corrective Actions

Corrective actions for infrequent or unintentional actions, such as coding mistakes in claims, may consist of first asking the healthcare provider to fix the claims submission. As described earlier, depending on the frequency and severity of the billing error, HFPP payer Partners may provide additional education in claims submissions to encourage a behavioral change in healthcare providers' coding and billing practices. HFPP payer Partners also deny claims if they find that a service was not rendered or if the claim was not billed correctly. If HFPP payer Partners observe red flags indicating potential unlawful intent, they may refer the matter to law enforcement; if they do not discern the likelihood of unlawful intent, they may simply pursue recoupment of the payments. HFPP payer Partners that were interviewed also indicated that they consider re-auditing the healthcare provider after some period of time, frequently six months, for compliance or consider a pre-pay review process to mitigate up-front financial loss. Some HFPP payer Partners may also recover overpayments involved in the scheme or ask the healthcare provider to pay a penalty. These payer Partners may place payment withholds for future claims and bills until the error is fixed. Taking note of the PHE, many of these HFPP payer Partners have also relaxed their recoupment policies and offered healthcare providers a payment plan in case they are unable to immediately repay the overpayment or penalty.

Law Enforcement Operations

Pre-dating the onset of the PHE, the U.S. Department of Justice (DOJ) completed several operations in which there were accusations of telehealth fraud.^x For example, "Operation Brace Yourself," announced by the DOJ in 2019, included federal indictments of 24 defendants for alleged fraud schemes involving more than \$1.2 billion in losses.⁸⁸ This

^xIt is important to note that the numbers in DOJ reports can encompass a variety of fraud platforms, including telemedicine and telemarketing frauds. It can be challenging to cleanly separate the two for multiple reasons: 1) The fraud begins with telemarketing, which in real time, converts the lead to telemedicine visit with a provider. 2) A given case is a hybrid of different frauds and may include telemarketers, identify theft, sham telemedicine visit, real telemedicine visit, etc. 3) Data is predicted based on the actual billing of a telemedicine visit to categorize it as a telemedicine case, but in some instances, a physician never bills for said telemedicine visit and, instead, robo-signs the patient to receive DME and receive a salary or kickback from the DME company. Consequently, it is challenging to categorize and differentiate a case as "telemedicine" or "telemarketing."

operation involved payment of illegal kickbacks and bribes to telehealth companies that allegedly paid physicians to write medically unnecessary orders for back, shoulder, wrist, and knee braces without any patient interaction or only a brief telephone conversation with patients they had never met or seen.⁸⁸ Building on “Operation Brace Yourself,” after the start of the PHE, the DOJ, in 2020, announced charges against 86 criminal defendants who submitted \$4.5 billion in false and fraudulent telemedicine claims.⁹⁷ The schemes included telehealth companies allegedly paying doctors and nurse practitioners kickbacks or bribes to write unnecessary orders for DME, genetic testing, diagnostic testing, and pain medication without any patient interaction or only a brief telephone conversation with the patient and submitting false claims to health insurance plans.⁹⁷ CMS also took administrative action against 256 medical professionals and revoked their billing privileges due to their alleged involvement in telemedicine schemes.⁹⁷ A recent nationwide federal law enforcement action reported that in 2021, 43 criminal defendants from 11 U.S. federal judicial districts billed over \$1.1 billion in fraudulent telemedicine-related claims to Medicare.⁸⁹ In a 2022 DOJ report, one healthcare professional was charged with wire fraud, healthcare fraud, and a kickback scheme, in which they allegedly were involved in sham billing of telemedicine encounters or services that were not rendered, as well as ordering unnecessary genetic testing in exchange for access to the telehealth patients.⁹¹ In both the 2021 and 2022 reports, the DOJ emphasized that some rules and regulations expanded by CMS to enable increased access to care during the PHE were exploited to bill for false and fraudulent claims for sham telehealth encounters.^{11,91}

RECOMMENDATIONS

Methods of Identifying Fraud, Waste, and Abuse in Telehealth

In their interviews, HFPP Partners strongly advocated for proactive data analytics to identify spikes, rapid changes, or outliers in utilization and billing that can help detect fraud, waste, and abuse schemes, such as “improbable” day billing, POS Code error,^y etc. Focusing on proactive models can help ensure that organizations are ahead of the emerging telehealth schemes, and, in turn, evolve their models to effectively combat fraud, waste, and abuse. HFPP Partners also suggested looking diligently at patient or member complaints and to increase collaboration with their internal complaints department. Many times, fraud, waste, and abuse can be identified by talking to patients and beneficiaries; thus, collaborating with the member community to discuss their health insurance plans is important. During these conversations, payers can also verify services rendered via telehealth and cross-reference with claims. In addition, HFPP Partners also encouraged payers and law enforcement to review medical records, either electronic or paper, to verify services rendered via telehealth.

Increasing Patient Education

HFPP Partners suggested educating patients about healthcare fraud, telehealth fraud, and telemarketing schemes, including how to report these suspicious activities. In addition, they recommended informing members of the potential consequences of being a victim of a telehealth fraud scheme, such as identity theft, to reinforce the dangers of giving out confidential health information or member health plan identification numbers. They proposed that this information can be highlighted on the organization’s website or targeted to members via mailings and newsletters. Furthermore, HFPP Partners stated that payers should strongly encourage their members to review their EOBs and claims history. They also suggested payers should make their EOBs simple and easy to understand to assist members in identifying suspicious activities in their claims and, consequently, prevent identity theft. They added that members should be aware of the type of medically necessary products they can order through their health benefits and report if the product is not delivered. A few HFPP Partners suggested that healthcare professionals, such as a care coordinator, can share information about telehealth fraud schemes and review member benefits during their care visits, especially with older adults or low-income individuals due to their increased risk for healthcare fraud victimization.

Informing Providers about Fraud, Waste, and Abuse Schemes

HFPP Partners shared the importance of educating healthcare providers of potential fraud, waste, and abuse schemes by sharing current or new telehealth regulations, new waivers, and proper billing codes by emails, news blasts, or mailings. This can help

^yPlace of Service Codes are two-digit codes added on healthcare claims which indicates the setting in which a service was provided.⁹⁸

healthcare providers remain up-to-date with new regulations, accountable for their actions, and vigilant against efforts to target them to be part of a fraudulent scheme without their knowledge. Furthermore, a few HFPP Partners interviewed suggested payers should offer peer benchmarking to healthcare providers (i.e., how their claims submissions compare to their peers in the same specialty or region) to help them self-monitor and actively engage in detecting fraud, waste, and abuse in their practices.

Increased Collaboration and Cross-Training

Many HFPP Partners encouraged collaborative ties among federal and state agencies, law enforcement, and private payers to share information and learn about emerging trends in telehealth. They added that collaboration with law enforcement and medical licensure boards is a valuable approach to prevent the proliferation of fraud, waste, and abuse schemes. HFPP Partners recommended engaging with local healthcare fraud task forces run by the DOJ, HHS-OIG, or anti-fraud associations, such as the HFPP and NHCAA, to create and foster partnerships across the healthcare industry. HFPP Partners recognized the value in sharing data with the HFPP to help develop a mass detection tool and create a feedback loop between payers and law enforcement to jointly combat fraud, waste, and abuse.

HFPP Partners also mentioned during the interviews that continued training and education for investigators is beneficial to learn about emerging schemes in the industry. Moreover, cross-training member-facing staff to recognize red flags while talking to members about their claims in real-time can help detect fraud, waste, and abuse. They also added that providing member-facing staff access to, and contact information for, SIUs and compliance hotlines can help with reporting fraud, waste, and abuse through internal means.

Considerations in Identifying Fraud, Waste, and Abuse in Telehealth

HFPP Partners indicated that, similar to in-person care, challenges to investigating and identifying fraud, waste, and abuse in telehealth include:

1. Verifying if a rendered service was fraudulent
2. Proving unlawful intent for errors in billing claims
3. Different thresholds among Partners for measuring severity of a scheme
4. Limited resources (e.g., lack of funding for monitoring efforts, staff shortages)

HFPP Partners also stated that because healthcare fraud, waste, and abuse are ever-evolving, especially for telehealth services, the need to adapt to the quickly evolving policies and flexibilities can make identification or investigative efforts challenging. As an example, an HFPP Partner raised concerns that, as more flexible policies and regulations were intentionally implemented during the PHE, a newly identified billing or utilization trend could sometimes go undetected using standard monitoring tactics. Therefore, it could be challenging to determine whether the trend was considered fraud and what

appropriate action(s) to take.

Accordingly, some HFPP Partners expressed a desire for updated governmental policies, regulations, and guidelines on what services are covered under telehealth in order to guide audits and fraud investigations. HFPP Partners also suggested that policies and regulations surrounding healthcare providers enrollment and state licensure to practice telehealth need to be discussed and reviewed further as telehealth care delivery is increasingly being utilized during the PHE and is expected to be used beyond the PHE. Although HFPP Partners recognized that they are asking for more governmental regulations, they indicated that for telehealth, it would be helpful in creating consistency across different payers and how claims are handled overall. Thus, HFPP Partners stressed the importance of being diligent and collaborative when conducting investigations to identify potential fraud, waste, and abuse schemes while also being considerate of existing laws, regulatory oversights, contracts, and restrictions. Moreover, they suggested that systems used to identify fraud, waste, and abuse must remain dynamic so that changes in laws and regulations do not lead to temporary and unintended enforcement gaps that could be exploited by bad actors.

CONCLUSION AND FUTURE DIRECTION

In response to the COVID-19 PHE, telehealth has become a necessity to provide healthcare. However, the telehealth policies expanded by Congress, governmental healthcare agencies, and payers to increase access to care during the PHE were exploited by bad actors to commit fraud, waste, and abuse. In this white paper, we have discussed methods to identify and mitigate fraud, waste, and abuse in telehealth, reviewed enforcement of telehealth, and provided recommendations for prevention.

Telehealth utilization accelerated during the PHE to provide access to healthcare when traditional office visits were not feasible. It helped reduce patient travel burden and costs to their providers' offices, overcome clinician shortages in underserved communities, enable continuity of care to vulnerable patients, prevent the spread of infectious diseases, and reduce appointment cancellations and no-shows. Consequently, telehealth is expected to remain an important tool in the healthcare industry beyond the PHE. Certain barriers, such as the technological divide and digital literacy associated with age, race, and socioeconomic status, should be addressed to provide equitable access to telehealth for all.

All HFPP Partners that were interviewed reported that they expect a more expansive use of telehealth services to continue beyond the PHE. Some Partners discussed that the states within which they operate have already made telehealth coverage permanent for private insurers. Partners' views varied on the expanded implementation of telehealth. Some HFPP Partners are looking to federal and state agencies for guidance, while others are already discussing what services they may or may not keep (e.g., COVID-19-related care) beyond the PHE. Questions about which services will remain eligible, who will be covered, and reimbursement rates will depend on congressional and state legislative action, policy decisions of CMS and states, and business decisions made by commercial payers (e.g., whether providing telehealth services can give them a competitive advantage over other private payers).

Although questions surrounding policy aspects of telehealth remain, it is anticipated to remain an essential mode of healthcare delivery beyond the PHE due to its benefits and convenience. Therefore, it is important to create and implement systems to help prevent and detect related fraud, waste, and abuse. Specific areas of focus for prevention efforts include developing strong data analytics to improve detection of potential telehealth schemes and creating robust awareness programs for patients and healthcare providers to learn about potential schemes. Lastly, many HFPP Partners emphasized the benefits of fostering collaboration and information-sharing between payers, healthcare systems, law enforcement, and policymakers to proactively monitor telehealth fraud, waste, and abuse.

REFERENCES

1. Department of Health and Human Services. What is telehealth? Published August 16, 2021. <https://telehealth.hhs.gov/patients/understanding-telehealth/>
2. Centers for Medicare & Medicaid Services. Telehealth. Medicaid.gov. Published 2022. <https://www.medicaid.gov/medicaid/benefits/telehealth/index.html>
3. Centers for Medicare & Medicaid Services. Medicare Telemedicine Snapshot. Published 2021. <https://www.cms.gov/medicare-telemedicine-snapshot>
4. O'Connor M, Asdornwised U, Dempsey ML, et al. Using Telehealth to Reduce All-Cause 30-Day Hospital Readmissions among Heart Failure Patients Receiving Skilled Home Health Services. *Appl Clin Inform*. 2016;7(2):238-247. doi:10.4338/ACI-2015-11-SOA-0157
5. American Academy of Family Physicians. Telehealth and Telemedicine. Published December 2021. <https://www.aafp.org/about/policies/all/telehealth-telemedicine.html>
6. Agboola S, Havasy R, Myint-U K, Kvedar J, Jethwani K. The impact of using mobile-enabled devices on patient engagement in remote monitoring programs. *J Diabetes Sci Technol*. 2013;7(3):623-629. doi:10.1177/193229681300700306
7. Agboola SO, Ju W, Elfiky A, Kvedar JC, Jethwani K. The Effect of Technology-Based Interventions on Pain, Depression, and Quality of Life in Patients With Cancer: A Systematic Review of Randomized Controlled Trials. *J Med Internet Res*. 2015;17(3):e4009. doi:10.2196/jmir.4009
8. Ollove M. Telehealth May Be Here to Stay. *Stateline Initiat Pew Charit Trusts*. Published December 1, 2021. <https://pew.org/3E9TdvJ>
9. Grimm CA. *Hospital Experiences Responding to the COVID-19 Pandemic: Results of a National Pulse Survey March 23–27, 2020*. U.S. Department of Health and Human Services Office of Inspector General; 2020:41. <https://oig.hhs.gov/oei/reports/oei-06-20-00300.pdf>
10. Centers for Medicare & Medicaid Services. *Medicare Fraud & Abuse: Prevent, Detect, Report.*; 2021:23. <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/Fraud-Abuse-MLN4649244.pdf>
11. U.S. Department of Justice. DOJ Announces Coordinated Law Enforcement Action to Combat Health Care Fraud Related to COVID-19. Published May 26, 2021. <https://www.justice.gov/opa/pr/doj-announces-coordinated-law-enforcement-action-combat-health-care-fraud-related-covid-19>
12. Turner M. Fraud, waste and abuse in health care claims: A bad situation worsened by the pandemic. BenefitsPRO. Published April 7, 2021. <https://www.benefitspro.com/2021/04/07/fraud-waste-and-abuse-in-health-care-claims-a-bad-situation-worsened-by-the-pandemic/>
13. Department of Health and Human Services Office of Inspector General. 2020 National Health Care Fraud Takedown. Published September 7, 2021. <https://oig.hhs.gov/newsroom/media-materials/2020takedown/>
14. Gunasekera E, Brooker R. In Recent National Health Care Fraud Enforcement Action, Telemedicine Fraud Takes the Gold. *The National Law Review*. <https://www.natlawreview.com/article/recent-national-health-care-fraud-enforcement-action-telemedicine-fraud-takes-gold>. Published September 23, 2021.
15. Centers for Medicare & Medicaid Services. Healthcare Fraud Prevention Partnership. Healthcare Fraud Prevention Partnership. Published February 22, 2022. <https://www.cms.gov/hfpp>
16. Shaver J. The State of Telehealth Before and After the COVID-19 Pandemic. *Prim Care*. 2022;49(4):517-530. doi:10.1016/j.pop.2022.04.002
17. Flodgren G, Rachas A, Farmer AJ, Inzitari M, Shepperd S. Interactive telemedicine: effects on professional practice and health care outcomes. *Cochrane Database Syst Rev*. 2015;(9). doi:10.1002/14651858.CD002098.pub2

18. Totten AM, Womack DM, Eden KB, et al. *Telehealth: Mapping the Evidence for Patient Outcomes From Systematic Reviews*. Agency for Healthcare Research and Quality (US); 2016. <http://www.ncbi.nlm.nih.gov/books/NBK379320/>
19. Totten AM, Hansen RN, Wagner J, et al. *Telehealth for Acute and Chronic Care Consultations*. Agency for Healthcare Research and Quality (US); 2019. <http://www.ncbi.nlm.nih.gov/books/NBK547239/>
20. Baughman DJ, Jabbarpour Y, Westfall JM, et al. Comparison of Quality Performance Measures for Patients Receiving In-Person vs Telemedicine Primary Care in a Large Integrated Health System. *JAMA Netw Open*. 2022;5(9):e2233267. doi:10.1001/jamanetworkopen.2022.33267
21. Reed M, Huang J, Graetz I, Muelly E, Millman A, Lee C. Treatment and Follow-up Care Associated With Patient-Scheduled Primary Care Telemedicine and In-Person Visits in a Large Integrated Health System. *JAMA Netw Open*. 2021;4(11):e2132793. doi:10.1001/jamanetworkopen.2021.32793
22. Legal Information Institute, Cornell Law School. 42 CFR § 410.78 - Telehealth services. Published 2022. <https://www.law.cornell.edu/cfr/text/42/410.78>
23. Chu RC, Peters C, Lew ND, Sommers BD. State Medicaid Telehealth Policies Before and During the COVID-19 Public Health Emergency. Office of the Assistant Secretary for Planning and Evaluation (ASPE) Published July 19, 2021. <https://aspe.hhs.gov/reports/state-medicare-telehealth-policies>
24. Kvedar JC, Nesbitt T, Kvedar JG, Darkins A. E-patient connectivity and the near term future. *J Gen Intern Med*. 2011;26 Suppl 2:636-638. doi:10.1007/s11606-011-1763-0
25. Tieman JJ, Swetenham K, Morgan DD, To TH, Currow DC. Using telehealth to support end of life care in the community: A feasibility study. *BMC Palliat Care*. 2016;15(1):94. doi:10.1186/s12904-016-0167-7
26. Tuckson RV, Edmunds M, Hodgkins ML. Telehealth. *N Engl J Med*. 2017;377(16):1585-1592. doi:10.1056/NEJMSr1503323
27. Sun R, Blayney DW, Hernandez-Boussard T. Health management via telemedicine: Learning from the COVID-19 experience. *J Am Med Inform Assoc JAMIA*. 2021;28(11):2536-2540. doi:10.1093/jamia/ocab145
28. Centers for Disease Control and Prevention. Using Telehealth to Expand Access to Essential Health Services during the COVID-19 Pandemic. COVID-19. Published June 10, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/telehealth.html>
29. Centers for Medicare & Medicaid Services. *COVID-19 Emergency Declaration Blanket Waivers for Health Care Providers*; 2021. <https://www.cms.gov/files/document/summary-covid-19-emergency-declaration-waivers.pdf>
30. Department of Health and Human Services. HIPAA flexibility for telehealth technology. Published January 28, 2021. <https://telehealth.hhs.gov/providers/policy-changes-during-the-covid-19-public-health-emergency/hipaa-flexibility-for-telehealth-technology/>
31. Department of Health and Human Services. Introduction to direct-to-consumer telehealth. Published February 25, 2021. <https://telehealth.hhs.gov/providers/direct-to-consumer/>
32. Centers for Medicare & Medicaid Services. *Medicare and Medicaid Programs; Policy and Regulatory Revisions in Response to the COVID-19 Public Health Emergency*. Department of Health and Human Services; 2020. <https://s3.amazonaws.com/public-inspection.federalregister.gov/2020-06990.pdf>
33. Centers for Medicare & Medicaid Services. Medicare Telemedicine Health Care Provider Fact Sheet. Published March 17, 2020. <https://www.cms.gov/newsroom/fact-sheets/medicare-telemedicine-health-care-provider-fact-sheet>
34. Centers for Medicare & Medicaid Services. Coronavirus Waivers & Flexibilities. Published June 2021. <https://www.cms.gov/about-cms/emergency-preparedness-response-operations/current-emergencies/coronavirus-waivers>
35. Department of Health and Human Services. Billing and coding Medicare Fee-for-Service claims. Telehealth. Published December 15, 2021. <https://telehealth.hhs.gov/providers/billing-and-reimbursement/billing-and-coding-medicare-fee-for-service-claims/>
36. Centers for Medicare & Medicaid Services. Calendar Year 2022 Medicare Physician Fee Schedule Final Rule. Published November 2, 2021. <https://www.cms.gov/newsroom/fact-sheets/calendar-year-cy-2022-medicare-physician-fee-schedule-final-rule>

37. Rudich J, Conmy AB, Chu RC, Peters C, Lew ND, Sommers BD. *State Medicaid Telehealth Policies Before and During the COVID-19 Public Health Emergency: 2022 Update*. Department of Health and Human Services; 2022. <https://aspe.hhs.gov/sites/default/files/documents/190b4b132f984db14924cbad00d19cce/Medicaid-Telehealth-1B-Update-Final.pdf>
38. Centers for Medicare & Medicaid Services. Tools and Checklists for States. Published March 2022. <https://www.medicaid.gov/resources-for-states/coronavirus-disease-2019-covid-19/tools-and-checklists-for-states/index.html>
39. Ohl D. Lack of telehealth law in Pennsylvania a major headache for patients who need it most. <https://www.inquirer.com>. Published December 2021. <https://www.inquirer.com/health/spl/pennsylvania-telehealth-law-regulations-abortion-20211213.html>
40. Drug Enforcement Administration. COVID-19 Information Page. COVID-19 Information Page. Published March 2020. <https://www.deadiversion.usdoj.gov/coronavirus.html>
41. Drug Enforcement Administration. How to Prescribe Controlled Substances to Patients During the COVID-19 Public Health Emergency. Published March 31, 2020. [https://www.deadiversion.usdoj.gov/GDP/\(DEA-DC-023\)\(DEA075\)Decision_Tree_\(Final\)_33120_2007.pdf](https://www.deadiversion.usdoj.gov/GDP/(DEA-DC-023)(DEA075)Decision_Tree_(Final)_33120_2007.pdf)
42. Department of Health and Human Services Office of Inspector General. *Medicare Telehealth Services During the First Year of the Pandemic: Program Integrity Risks*; 2022. <https://oig.hhs.gov/oei/reports/OEI-02-20-00720.pdf>
43. The White House. Proclamation on Declaring a National Emergency Concerning the Novel Coronavirus Disease (COVID-19) Outbreak. Published March 13, 2020. <https://trumpwhitehouse.archives.gov/presidential-actions/proclamation-declaring-national-emergency-concerning-novel-coronavirus-disease-covid-19-outbreak/>
44. Douglas MD, Xu J, Heggs A, Wrenn G, Mack DH, Rust G. Assessing Telemedicine Utilization by Using Medicaid Claims Data. *Psychiatr Serv Wash DC*. 2017;68(2):173-178. doi:10.1176/appi.ps.201500518
45. Talbot JA, Burgess AR, Thayer D, Parenteau L, Paluso N, Coburn AF. Patterns of Telehealth Use Among Rural Medicaid Beneficiaries. *J Rural Health Off J Am Rural Health Assoc Natl Rural Health Care Assoc*. 2019;35(3):298-307. doi:10.1111/jrh.12324
46. Centers for Medicare & Medicaid Services. Medicaid & CHIP and the COVID-19 Public Health Emergency: Preliminary Medicaid & CHIP Data Snapshot. Services Delivered via Telehealth to Medicaid & CHIP Beneficiaries during the COVID-19 Public Health Emergency. Published October 31, 2020. <https://www.medicaid.gov/state-resource-center/downloads/covid-19-medicaid-data-snapshot.pdf>
47. Eberly LA, Kallan MJ, Julien HM, et al. Patient Characteristics Associated With Telemedicine Access for Primary and Specialty Ambulatory Care During the COVID-19 Pandemic. *JAMA Netw Open*. 2020;3(12):e2031640. doi:10.1001/jamanetworkopen.2020.31640
48. Patel SY, Mehrotra A, Huskamp HA, Uscher-Pines L, Ganguli I, Barnett ML. Variation In Telemedicine Use And Outpatient Care During The COVID-19 Pandemic In The United States. *Health Aff Proj Hope*. 2021;40(2):349-358. doi:10.1377/hlthaff.2020.01786
49. Pierce RP, Stevermer JJ. Disparities in use of telehealth at the onset of the COVID-19 public health emergency. *J Telemed Telecare*. Published October 21, 2020:1357633X20963893. doi:10.1177/1357633X20963893
50. Samson LW, Tarazi W, Turrini G, Sheingold S. *Medicare Beneficiaries' Use of Telehealth in 2020: Trends by Beneficiary Characteristics and Location*. Office of the Assistant Secretary for Planning and Evaluation; 2021. <https://aspe.hhs.gov/sites/default/files/documents/a1d5d810fe3433e18b192be42dbf2351/medicare-telehealth-report.pdf>
51. Qian AS, Schiaffino MK, Nalawade V, et al. Disparities in telemedicine during COVID-19. *Cancer Med*. 2022;11(4):1192-1201. doi:10.1002/cam4.4518
52. Dixit N, Van Sebille Y, Crawford GB, Ginex PK, Ortega PF, Chan RJ. Disparities in telehealth use: How should the supportive care community respond? *Support Care Cancer*. 2022;30(2):1007-1010. doi:10.1007/s00520-021-06629-4
53. Eberly LA, Khatana SAM, Nathan AS, et al. Telemedicine Outpatient Cardiovascular Care during the COVID-19 Pandemic: Bridging or Opening the Digital Divide? *Circulation*. 2020;142(5):510-512. doi:10.1161/CIRCULATIONAHA.120.048185
54. Department of Health and Human Services Office of Inspector General. *Certain Medicare Beneficiaries, Such as Urban and Hispanic Beneficiaries, Were More Likely Than Others To Use Telehealth During the First Year of the*

COVID-19 Pandemic.; 2022. <https://oig.hhs.gov/oei/reports/OEI-02-20-00522.pdf>

55. Lucas JW, Villarroel MA. *Telemedicine Use Among Adults: United States, 2021*. National Center for Health Statistics (U.S.); 2022. doi:10.15620/cdc:121435
56. Wiefels MD, Gmunder KN, Ruiz JW. Patient income level and health insurance correlate with differences in health care utilization during the COVID-19 pandemic. *J Public Health Res*. 2023;12(1):22799036231160624. doi:10.1177/22799036231160624
57. Ng BP, Park C. Accessibility of Telehealth Services During the COVID-19 Pandemic: A Cross-Sectional Survey of Medicare Beneficiaries. *Prev Chronic Dis*. 2021;18:E65. doi:10.5888/pcd18.210056
58. Ndugga N, Artiga S. *Disparities in Health and Health Care: 5 Key Questions and Answers*. Kaiser Family Foundation; 2021. <https://www.kff.org/racial-equity-and-health-policy/issue-brief/disparities-in-health-and-health-care-5-key-question-and-answers/>
59. Chaves K, Gray D, Barton B, et al. *2019 National Healthcare Quality and Disparities Report*. Agency for Healthcare Research and Quality; 2020.
60. Nadeem MF, Kaiser LR. Disparities in Health Care Delivery Systems. *Thorac Surg Clin*. 2022;32(1):13-21. doi:10.1016/j.thorsurg.2021.09.005
61. Shah SD, Alkureishi L, Lee WW. Seizing The Moment For Telehealth Policy And Equity. *Health Affairs Forefront*. Published September 13, 2021. <https://www.healthaffairs.org/doi/10.1377/forefront.20210909.961330/full/>
62. Gomez T, Anaya YB, Shih KJ, Tarn DM. A Qualitative Study of Primary Care Physicians' Experiences With Telemedicine During COVID-19. *J Am Board Fam Med*. 2021;34(Supplement):S61-S70. doi:10.3122/jabfm.2021.S1.200517
63. Almuqarrab A, Almuqamam A, Alhayki F, et al. The Impact of Waived Cost-Sharing Policy on COVID-19 Daily Testing and Deaths. *Cureus*. 2022;14(2). doi:10.7759/cureus.21843
64. AHIP. Health Insurance Providers Respond to Coronavirus (COVID-19). AHIP. Published August 27, 2021. <https://www.ahip.org/news/articles/health-insurance-providers-respond-to-coronavirus-covid-19>
65. Goodwin S, Anderson G. Effect of Cost-Sharing Reductions on Preventive Service Use Among Medicare Fee-for-Service Beneficiaries. *Medicare Medicaid Res Rev*. 2012;2(1):E1-E26. doi:10.5600/mmrr.002.01.a03
66. Fedewa SA, Goodman M, Flanders WD, et al. Elimination of cost-sharing and receipt of screening for colorectal and breast cancer. *Cancer*. 2015;121(18):3272-3280. doi:10.1002/cncr.29494
67. Cook BL, Flores M, Zuvekas SH, et al. The Impact Of Medicare's Mental Health Cost-Sharing Parity On Use Of Mental Health Care Services. *Health Aff (Millwood)*. 2020;39(5):819-827. doi:10.1377/hlthaff.2019.01008
68. Wong MD, Andersen R, Sherbourne CD, Hays RD, Shapiro MF. Effects of Cost Sharing on Care Seeking and Health Status: Results From the Medical Outcomes Study. *Am J Public Health*. 2001;91(11):1889-1894. doi:10.2105/AJPH.91.11.1889
69. Ladin K, Porteny T, Perugini JM, et al. Perceptions of Telehealth vs In-Person Visits Among Older Adults With Advanced Kidney Disease, Care Partners, and Clinicians. *JAMA Netw Open*. 2021;4(12):e2137193. doi:10.1001/jamanetworkopen.2021.37193
70. Federal Communications Commission. COVID-19 Telehealth Program - Frequently Asked Questions (FAQs). Federal Communications Commission. Published April 13, 2020. <https://www.fcc.gov/covid-19-telehealth-program-frequently-asked-questions-faqs>
71. Gilson SF, Umscheid CA, Laiteerapong N, Ossey G, Nunes KJ, Shah SD. Growth of Ambulatory Virtual Visits and Differential Use by Patient Sociodemographics at One Urban Academic Medical Center During the COVID-19 Pandemic: Retrospective Analysis. *JMIR Med Inform*. 2020;8(12):e24544. doi:10.2196/24544
72. Weber E, Miller SJ, Astha V, Janevic T, Benn E. Characteristics of telehealth users in NYC for COVID-related care during the coronavirus pandemic. *J Am Med Inform Assoc*. 2020;27(12):1949-1954. doi:10.1093/jamia/ocaa216
73. Thronson LR, Jackson SL, Chew LD. The Pandemic of Health Care Inequity. *JAMA Netw Open*. 2020;3(10):e2021767. doi:10.1001/jamanetworkopen.2020.21767
74. Clark CR, Akdas Y, Wilkins CH, et al. TechQuity is an imperative for health and technology business: Let's work together to achieve it. *J Am Med Inform Assoc*. 2021;28(9):2013-2016. doi:10.1093/jamia/ocab103

75. Gajarawala SN, Pelkowski JN. Telehealth Benefits and Barriers. *J Nurse Pract.* 2021;17(2):218-221. doi:10.1016/j.nurpra.2020.09.013
76. Romanchych E, Desai R, Bartha C, Carson N, Korenblum M, Monga S. Healthcare providers' perceptions of virtual-care with children's mental health in a pandemic: A hospital and community perspective. *Early Interv Psychiatry.* 2022;16(4):433-443. doi:10.1111/eip.13196
77. Federal Communications Commission. In the Matter of Promoting Telehealth for Low-Income Consumers COVID-19 Telehealth Program. Published April 2, 2020. <https://docs.fcc.gov/public/attachments/FCC-20-44A1.pdf>
78. Lloyd J, Lee CJ. Use of Telemedicine in Care of Hematologic Malignancy Patients: Challenges and Opportunities. *Curr Hematol Malig Rep.* Published January 11, 2022. doi:10.1007/s11899-021-00642-4
79. Thompson D. Telemedicine as Good as In-Person for Many Health Conditions: Review. HealthDay. Published January 3, 2022. <https://consumer.healthday.com/1-3-telemedicine-as-good-as-in-person-for-many-health-conditions-review-2656171874.html>
80. Herzer KR, Pronovost PJ. Ensuring Quality in the Era of Virtual Care. *JAMA.* 2021;325(5):429-430. doi:10.1001/jama.2020.24955
81. Alexander GC, Tajanlangit M, Heyward J, Mansour O, Qato DM, Stafford RS. Use and Content of Primary Care Office-Based vs Telemedicine Care Visits During the COVID-19 Pandemic in the US. *JAMA Netw Open.* 2020;3(10):e2021476. doi:10.1001/jamanetworkopen.2020.21476
82. Valenta SR, Glanville M, Sederstrom E. Telehealth Development, Implementation, and Sustainability Challenges: An Introduction into the Telehealth Service Implementation Model (TSIMTM). In: Ford DW, Valenta SR, eds. *Telemedicine: Overview and Application in Pulmonary, Critical Care, and Sleep Medicine.* Respiratory Medicine. Springer International Publishing; 2021:61-69. doi:10.1007/978-3-030-64050-7_4
83. Hilty DM, Gentry MT, McKean AJ, Cowan KE, Lim RF, Lu FG. Telehealth for rural diverse populations: telebehavioral and cultural competencies, clinical outcomes and administrative approaches. *mHealth.* 2020;6:20. doi:10.21037/mhealth.2019.10.04
84. Uscher-Pines L, Bouskill KE, Sousa J, Shen M, Fischer SH. Experiences of Medicaid Programs and Health Centers in Implementing Telehealth. *Rand Health Q.* 2020;8(4):RR-2564-ASPE.
85. Berry MD. Telehealth expansion provides new opportunities for fraud. Thomson Reuters Institute. Published April 5, 2021. <https://www.thomsonreuters.com/en-us/posts/investigation-fraud-and-risk/telehealth-fraud/>
86. Baumann F. Telemedicine leaves space open for FWA. SmartLight Analytics. Published August 1, 2021. <https://smartlightanalytics.com/telemedicine-leaves-space-open-for-fwa/>
87. Jiang Y, Sun P, Chen Z, et al. Patients' and healthcare providers' perceptions and experiences of telehealth use and online health information use in chronic disease management for older patients with chronic obstructive pulmonary disease: a qualitative study. *BMC Geriatr.* 2022;22:9. doi:10.1186/s12877-021-02702-z
88. U.S. Department of Justice. Federal Indictments & Law Enforcement Actions in One of the Largest Health Care Fraud Schemes Involving Telemedicine and Durable Medical Equipment Marketing Executives Results in Charges Against 24 Individuals Responsible for Over \$1.2 Billion in Losses. Published April 9, 2019. <https://www.justice.gov/opa/pr/federal-indictments-and-law-enforcement-actions-one-largest-health-care-fraud-schemes>
89. U.S. Department of Justice. National Health Care Fraud Enforcement Action Results in Charges Involving over \$1.4 Billion in Alleged Losses. Office of Public Affairs. Published September 17, 2021. <https://www.justice.gov/opa/pr/national-health-care-fraud-enforcement-action-results-charges-involving-over-14-billion>
90. Pandemic Response Accountability Committee. *Insights on Telehealth Use and Program Integrity Risks Across Selected Health Care Programs During the Pandemic.* Department of Health and Human Services, Office of Inspector General; 2022. <https://www.pandemicoversight.gov/media/file/telehealthfinal508nov30pdf>
91. Department of Justice. Justice Department Announces Nationwide Coordinated Law Enforcement Action to Combat Health Care-Related COVID-19 Fraud. Published April 20, 2022. <https://www.justice.gov/opa/pr/justice-department-announces-nationwide-coordinated-law-enforcement-action-combat-health-care>
92. Department of Health and Human Services Office of Inspector General. Principal Deputy Inspector General Grimm on Telehealth. Published February 26, 2021. https://oig.hhs.gov/coronavirus/letter-grimm-02262021.asp?utm_source=oig-web&utm_medium=oig-fb-share&utm_campaign=oig-grimm-letter-02262021
93. Ahmed M. Why automation, AI and ML are the future of the post-pandemic healthcare world in fraud and waste

prevention. MedCity News. Published August 31, 2022. <https://medcitynews.com/2022/08/why-automation-ai-and-ml-are-the-future-of-the-post-pandemic-healthcare-world-in-fraud-and-waste-prevention/>

94. Toomey D, Erkan L. To Fight Fraud, Waste and Abuse, Healthcare Providers Should Elevate Their Technology Game. The Protiviti View. Published September 17, 2021. <https://blog.protiviti.com/2021/09/17/to-fight-fraud-waste-and-abuse-healthcare-providers-should-elevate-their-technology-game/>
95. Department of Health and Human Services Office of Inspector General. *Special Fraud Alert: OIG Alerts Practitioners To Exercise Caution When Entering Into Arrangements With Purported Telemedicine Companies*; 2022. <https://oig.hhs.gov/documents/root/1045/sfa-telefraud.pdf>
96. Zelis. How Pre-Payment Review Elevates Payer Payment Integrity. Health Payer Intelligence. Published December 6, 2021. <https://healthpayerintelligence.com/news/how-pre-payment-review-elevates-payer-payment-integrity>
97. U.S. Department of Justice. 2020 National Health Care Fraud and Opioid Takedown. Published September 30, 2020. <https://www.justice.gov/criminal-fraud/hcf-2020-takedown/press-release>
98. Centers for Medicare & Medicaid Services. Place of Service Codes. Published December 1, 2021. <https://www.cms.gov/Medicare/Coding/place-of-service-codes>